TRANSCRIPT OF RECORD

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1926

No. 709. THE UNITED STATES OF AMERICA AND INTERSTATE COMMERCE COMMISSION, APPELLANTS, VS. BERWIND-WHITE COAL MINING COMPANY, WHITESIDELAND COAL COMPANY, NEW RIVER & POCAHONTAS CONSOLIDATED COAL COMPANY, ET AL.

No. 710. THE UNITED STATES OF AMERICA AND INTERSTATE COMMERCE COMMISSION, APPELLANTS, VS. BETHLEHEM STEEL COMPANY, BETHLEHEM MINES CORPORATION, BETHLEHEM STEEL CORPORATION, ET AL.

No. 711. THE UNITED STATES OF AMERICA AND INTERSTATE COMMERCE COMMISSION, APPELLANTS, VS. RAINEY-WOOD COKE COMPANY, SHAWKEE BY-PRODUCT COKE COMPANY, CHICAGO BY-PRODUCT COKE COMPANY, ET AL.

No. 712. THE UNITED STATES OF AMERICA AND INTERSTATE COMMERCE COMMISSION, APPELLANTS, VS. PUBLIC SERVICE ELECTRIC & GAS COMPANY

No. 713. POCAHONTAS OPERATORS' ASSOCIATION, EMPIRE COAL & COKE COMPANY, AND POCAHONTAS FUEL COMPANY, APPELLANTS, VS. BERWIND-WHITE COAL MINING COMPANY, WHITESIDELAND COAL COMPANY, NEW RIVER & POCAHONTAS CONSOLIDATED COAL COMPANY, ET AL.

No. 714. POCAHONTAS OPERATORS' ASSOCIATION, EMPIRE COAL & COKE COMPANY, AND POCAHONTAS FUEL COMPANY, APPELLANTS, VS. BETHLEHEM STEEL COMPANY, BETHLEHEM MINES CORPORATION, BETHLEHEM STEEL CORPORATION, ET AL.

No. 715. POCAHONTAS OPERATORS' ASSOCIATION, EMPIRE COAL & COKE COMPANY, AND POCAHONTAS FUEL COMPANY, APPELLANTS, VS. RAINEY-WOOD COKE COMPANY, SHAWKEE BY-PRODUCT COKE COMPANY, CHICAGO BY-PRODUCT COKE COMPANY, ET AL.

No. 716. POCAHONTAS OPERATORS' ASSOCIATION, EMPIRE COAL & COKE COMPANY, AND POCAHONTAS FUEL COMPANY, APPELLANTS, VS. PUBLIC SERVICE ELECTRIC & GAS COMPANY

APPEALS FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE EASTERN DISTRICT OF PENNSYLVANIA

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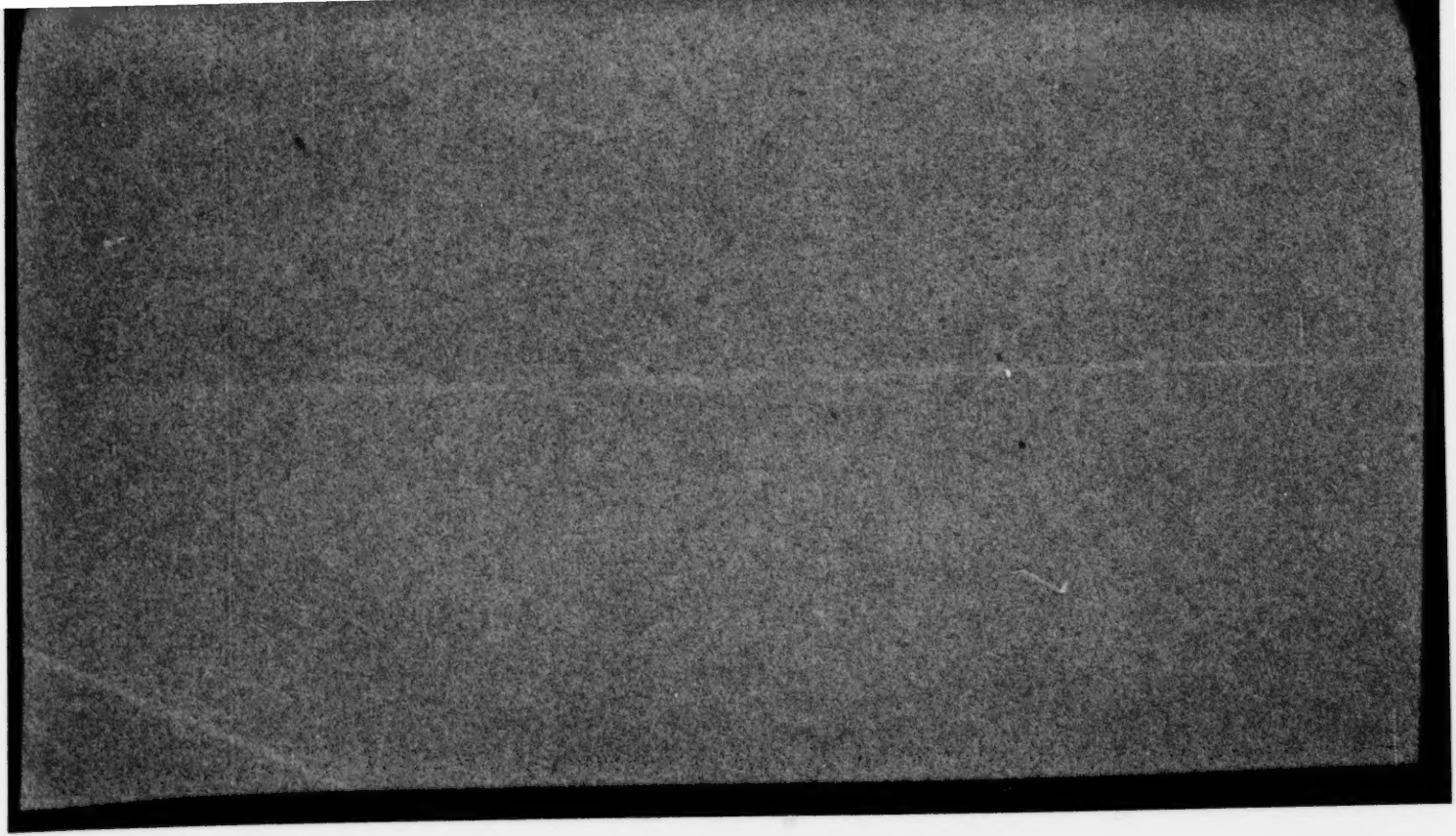

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PUBLIC SERVICE ELECTRIC & GAS COMPANY

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24397—27——1

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BETHLEHEM STEEL COMPANY, BETHLEHEM MINES CORPORATION, BETHLEHEM STEEL CORPORATION, ET AL.

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APPEALS FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE EASTERN DISTRICT OF PENNSYLVANIA

INDEX

	Original	Print
Record from United States District Court, Eastern District of Pennsylvania, in United States v. Berwind-White Coal Mining Co. et al	1	1
Caption [omitted in printing]	1	
Docket entries	2	1

	Original	Print
Record from United States District Court, Eastern District of Pennsylvania, in United States *v.* Berwind-White Coal Mining Co. et al.—Continued.		
Bill of complaint	5	3
Exhibit A. Railroad Commission of Ohio et al. *v.* H. V. Railway Co. (12 I. C. C. 398) [omitted in printing]	27	
Exhibit B. Traer *v.* Chicago & Alton Railroad Co. (13 I. C. C. 451) [omitted in printing]	49	
Exhibit C. Assignments of Freight Cars (57 I. C. C. 760) [omitted in printing]	61	
Exhibit D. Order of investigation of Interstate Commerce Commission with respect to the reasonableness and propriety of the present coal car distribution rules [omitted in printing]	71	
Exhibit E. Assigned Cars for Bituminous Coal Mines (80 I. C. C. 520)	73	15
Exhibit F. Order of October 9, 1923, reopening proceeding	236	81
Exhibit G. Assigned Cars for Bituminous Coal Mines (93 I. C. C. 701) (further report and order)	237	82
Exhibit H. In the Matter of Private Cars (50 I. C. C. 652) [omitted in printing]	313	
Exhibit I. Ruttle *v.* Pere Marquette R. R. Co. (13 I. C. C. 179) [omitted in printing]	399	
Exhibit J. Royal Coal & Coke Co. et al. *v.* Southern Railway Co. (13 I. C. C. 440) [omitted in printing]	410	
Exhibit K. Rail & River Coal Co. *v.* B. & O. R. R. Co. (14 I. C. C. 86) [omitted in printing]	427	
Exhibit L. Hillsdale Coal & Coke Co. *v.* P. R. R. Co. (19 I. C. C. 356) [omitted in printing]	443	
Answer of the United States	493	134
Intervention of Interstate Commerce Commission	500	136
Answer of Interstate Commerce Commission	501	137
Petition of Pocahontas Operators' Association et al. for leave to intervene	508	139
Amendment to answer	516	141
Final decree	517	142
Petition for appeal by United States and Interstate Commerce Commission	518	143
Assignments of error of United States and Interstate Commerce Commission	519	143
Order allowing appeal of United States and Interstate Commerce Commission	523	146
Præcipe for transcript of record	524	146
Summonses and severances	527	149
Notice of appeal	529	150
Citation and service [omitted in printing]	530	
Clerk's certificate [omitted in printing]	531	
Statement re opinion	532	151
Record from United States District Court, Eastern District of Pennsylvania, in United States et al. *v.* Bethlehem Steel Co. et al.	537	151
Caption	537	151
Docket entries	537	152

	Original	Print
Record from United States District Court, Eastern District of Pennsylvania, in United States et al. *v.* Bethlehem Steel Co. et al.—Continued.		
Petition	541	154
Exhibit A. Assigned Cars for Bituminous Coal Mines (80 I. C. C. 520) [omitted in printing]	571	
Exhibit B. Assigned Cars for Bituminous Coal Mines (93 I. C. C. 701) [omitted in printing]	733	
Petition of the Illinois Steel Co. et al. for leave to intervene	810	172
Petition of the Steel Co. of Canada (Ltd.) for leave to intervene	825	180
Petition of the Youngstown Sheet and Tube Co. for leave to intervene	836	186
Answer of the United States	845	191
Intervention of Interstate Commerce Commission	852	193
Answer of Interstate Commerce Commission	853	194
Answer of Interstate Commerce Commission to intervening petition of the Illinois Steel Co. et al	860	196
Answer of Interstate Commerce Commission to intervening petition of Steel Co. of Canada et al	867	199
Answer of Interstate Commerce Commission to intervening petition of the Youngstown Sheet and Tube Co	873	201
Petition of the Central Pennsylvania Coal Producers' Association for leave to intervene	879	203
Exhibit A. List of coal operators	884	205
Petition of Pocahontas Operators' Association et al. for leave to intervene	891	208
Answer of Pocahontas Operators' Association et al	899	216
Amendments to answer	919	219
Statement re opinion	923	220
Final decree	924	221
Petition for appeal by United States and Interstate Commerce Commission	928	222
Assignments of error of United States and Interstate Commerce Commission	933	225
Order allowing appeal of United States and Interstate Commerce Commission	933	225
Præcipe for transcript of record	933a	225
Summonses and severances	933d	227
Notice of appeal	935	229
Citation and service [omitted in printing]	936	
Clerk's certificate [omitted in printing]	937	
Record from United States District Court, Eastern District of Pennsylvania, in United States et al. *v.* Rainey-Wood Coke Co. et al	938	229
Caption [omitted in printing]	938	
Docket entries	938	230
Bill of complaint	942	231
Exhibits. Orders of Interstate Commerce Commission, June 13, 1923, and Dec. 23, 1924, in re distribution among coal mines of privately owned cars and cars for railroad fuel	977	251

	Original	Print
Record from United States District Court, Eastern District of Pennsylvania, in United States et al. *v.* Rainey-Wood Coke Co. et al.—Continued.		
Answer of the United States	981	254
Answer of the Interstate Commerce Commission	987	256
Petition of the Central Pennsylvania Coal Producers' Association for leave to intervene	994	259
Exhibit A. List of coal operators, showing also railroads on which mines are located and location of their general offices (copy) [omitted in printing]	1001	
Petition of Pocahontas Operators' Association et al. for leave to intervene	1008	261
Answer of the Pocahontas Operators' Association et al	1016	263
Amendment to answer	1033	271
Statement re opinion	1034	271
Final decree	1035	272
Petition for appeal by United States and Interstate Commerce Commission	1036	272
Assignments of error of United States and Interstate Commerce Commission	1037	273
Order allowing appeal of United States and Interstate Commerce Commission	1041	275
Præcipe for transcript of record	1042	276
Summonses and severances	1045	278
Notice of appeal	1047	279
Citation and service [omitted in printing]	1048	
Clerk's certificate [omitted in printing]	1049	
Record from United States District Court, Eastern District of Pennsylvania, in United States et al. *v.* Public Service Electric and Gas Co	1050	280
Caption [omitted in printing]	1051	
Docket entries	1051	280
Bill for injunction	1053	282
Exhibits No. 1 and 2, orders of Interstate Commerce Commission of June 13, 1923, and Dec. 23, 1924 (copies) [omitted in printing]	1069	
Answer of United States	1074	291
Answer of Interstate Commerce Commission	1079	293
Petition of Pocahontas Operators' Association et al. for leave to intervene	1084	296
Answer of Pocahontas Operators' Association et al	1092	298
Amendment to answer	1110	306
Testimony of Dudley Farrand	1111	307
Statement re opinion	1120	311
Final decree	1121	311
Petition for appeal by United States and Interstate Commerce Commission	1122	312
Assignments of error of United States and Interstate Commerce Commission	1123	
Order allowing appeal of United States and Interstate Commerce Commission	1127	315
Præcipe for transcript of record	1128	315

	Original	Print
Record from United States District Court, Eastern District of Pennsylvania, in United States et al. *v.* Public Service Electric and Gas Co.—Continued.		
Notice of appeal	1131	317
Summonses and severances	1132	318
Citation and service [omitted in printing]	1133	
Clerk's certificate [omitted in printing]	1134	
Appeal papers in Pocahontas Operators' Association et al. *v.* Berwind White Coal Mining Co. et al	1135	318
Petition for appeal	1136	319
Assignments of error	1137	319
Order allowing appeal	1142	322
Clerk's certificate [omitted in printing]	1143	
Appeal papers in Pocahontas Operators' Association *v.* Bethlehem Steel Co. et al	1144	323
Petition for appeal	1145	323
Assignments of error	1146	324
Order allowing appeal	1151	327
Clerk's certificate [omitted in printing]	1152	
Appeal papers in Pocahontas Operators' Association *v.* Rainey Wood Coke Co	1153	328
Petition for appeal	1154	328
Assignments of error	1155	329
Order allowing appeal	1160	332
Clerk's certificate [omitted in printing]	1161	
Appeal papers in Pocahontas Operators' Association et al. *v.* Public Service Electric and Gas Co	1162	333
Petition for appeal	1163	333
Assignments of error	1164	333
Order allowing appeal	1169	336
Clerk's certificate [omitted in printing]	1170	
Exhibits in evidence:		
Order of Interstate Commerce Commission, Mar. 22, 1921 [omitted in printing]	1171	
Order of Interstate Commerce Commission, June 17, 1922 [omitted in printing]	1173	
Exhibits A and B. Rules for rating for car distribution purposes [omitted in printing]	1174	
Exhibits in evidence:		
Order of Interstate Commerce Commission July 25, 1923 [omitted in printing]	1181	
Order of Interstate Commerce Commission Sept. 12, 1923 [omitted in printing]	1182	
Order of Interstate Commerce Commission, Oct. 9, 1923 [omitted in printing]	1183	
Order of Interstate Commerce Commission, Nov. 6, 1923 [omitted in printing]	1184	
Order of Interstate Commerce Commission, Dec. 14, 1923 [omitted in printing]	1185	
Order of Interstate Commerce Commission, Dec. 19, 1923 [omitted in printing]	1186	

Appeal papers in Pocahontas Operators' Association et al. v. Public Service Electric and Gas Co.—Continued.

	Original	Print
Exhibits in evidence—Continued.		
Order of Interstate Commerce Commission, Mar. 3, 1924 [omitted in printing]	1187	
Order of Interstate Commerce Commission, May 6, 1924 [omitted in printing]	1188	
Order of Interstate Commerce Commission, June 30, 1924 [omitted in printing]	1189	
Order of Interstate Commerce Commission, Oct. 22, 1924 [omitted in printing]	1190	
Order of Interstate Commerce Commission, Dec. 9, 1924 [omitted in printing]	1191	
Order of Interstate Commerce Commission, July 11, 1907	1193	337
Order of Interstate Commerce Commission, Mar. 2, 1908	1210	352
Order of Interstate Commerce Commission, Apr. 13, 1908	1229	367
Order of Interstate Commerce Commission, Apr. 13, 1908	1232	369
Order of Interstate Commerce Commission, June 2, 1908	1246	380
Order of Interstate Commerce Commission, Mar. 7, 1910	1260	392
Order of Interstate Commerce Commission, Jan. 18, 1917 [omitted in printing]	1295	
Order of Interstate Commerce Commission July 31, 1918	1347	422
Order of Interstate Commerce Commission, June 11, 1920	1418	484
Order of Interstate Commerce Commission, June 13, 1923	1433	497
Order of Interstate Commerce Commission, Dec. 23, 1924	1541	604
Order of Interstate Commerce Commission, Dec. 23, 1924 [omitted in printing]	1597	
Stipulation re statement of evidence and judge's signature	1673	656
Narrative statement of testimony before Interstate Commerce Commission	1676	657
Testimony of August G. Gutheim	1677	657
Eugene McAuliffe	1731	691
August G. Gutheim	1757	705
C. H. Markham	1759	707
Frank Hooker Alfred	1780	719
E. J. Pearson	1801	733
Charles W. Galloway	1822	746
Clarence G. Bowker	1852	765
W. L. Barnes	1866	774
J. C. Wroton	1871	776
J. W. Davin	1882	783
A. R. Beisel	1896	792
Edwin G. Goodwin	1901	794
D. E. Spangler	1911	801
August G. Gutheim	1918	805
John Calahan	1922	808
W. B. Reed	1961	832
George S. Bracket	1966	835
H. L. Tucker	1982	845
Charles F. Richardson	2004	857
A. W. Vogtle	2021	869
A. W. Pollock	2024	871

Appeal papers in Pocahontas Operators' Association et al. *v.* Public Service Electric and Gas Co.—Continued.

	Original	Print
Narrative statement of testimony, etc.—Continued.		
Testimony of D. H. Morton	2030	874
John Brophy	2038	878
David Cowan	2044	882
Joseph Dugan	2049	885
James B. Neal	2053	887
Malcolm McDougal	2064	894
B. E. Neal	2066	895
William J. Freeman	2080	903
S. R. Jennings	2087	907
Ralph Courtney	2089	908
Walter D. McKinney	2095	911
Robert Marshall	2108	919
Walter A. Jones	2111	921
W. C. Huber	2133	934
S. C. Higgins	2140	939
Allan H. Willett	2150	945
Eugene McAuliffe	2151	946
Thomas K. Maher	2178	962
L. D. Brydon	2195	973
Frederick W. Braggins	2201	976
S. C. Higgins (recalled)	2209	981
J. A. Paisley	2221	988
Jonas Waffle	2239	999
S. C. Higgins	2248	1005
E. M. Poston	2264	1014
John Callahan	2291	1032
D. E. Spangler	2294	1033
August G. Gutheim (recalled)	2294	1034
F. C. Smith	2319	1048
D. P. Morton	2322	1050
Albert L. Vogl	2339	1060
George C. Randall	2352	1067
L. F. Wilson	2355	1069
D. P. Morton (recalled)	2357	1071
E. G. Goodwin (recalled)	2370	1078
W. S. Andrews	2373	1080
D. E. Spangler (recalled)	2379	1084
F. C. Honnold	2384	1087
D. P. Morton (recalled)	2386	1089
Dudley Farrand	2388	1090
J. W. St. Clair	2397	1096
C. D. Boyd	2406	1101
Exhibit in evidence. Letter from W. S. Bronson to Geo. B. McGenty, Jan. 9, 1923	2416	1107
Offers in evidence	2423	1114
Testimony of Frank W. Holt	2425	1115
M. S. Conners	2431	1118
F. E. Herriman	2438	1123
W. C. Bower	2440	1124

Appeal papers in Pocahontas Operators' Association et al. *v.* Public Service Electric and Gas Co.—Continued.

	Original	Print
Narrative statement of testimony, etc.—Continued.		
Testimony of J. E. Davenport	2455	1133
L. S. Emery	2461	1136
E. A. Aikens	2463	1138
William L. Barnes	2469	1141
J. A. Pickering	2474	1145
J. M. Ferguson	2478	1147
C. B. Strohm	2485	1151
Robert Collett	2491	1156
A. L. Bergfeld	2499	1161
W. D. Beck	2502	1163
Exhibit in evidence. Letter from M. Hewitt, jr., to M. J. Gormally, Nov. 9, 1922	2505	1165
Testimony of A. S. Lewis	2507	1166
C. L. Hinkle	2516	1172
J. C. Wroton	2522	1175
E. R. Rouzer	2523	1176
J. W. Davin	2528	1178
F. E. Harriman	2535	1183
James J. Moynihan	2536	1183
George H. Jenkins	2545	1189
F. B. Price	2562	1199
H. B. Rust	2567	1203
Dudley Farrand (recalled)	2652	1257
S. Pemberton Hutchinson	2663	1263
J. M. Belleville	2675	1271
Edward J. Berwind	2687	1278
C. A. Buck	2708	1290
John M. Gross	2727	1302
Charles M. Schwab	2749	1315
James R. Campbell	2763	1323
Robert Hobson	2787	1337
Harry Coulby	2793	1342
John M. Gross (recalled)	2798	1345
Louis C. Bihler	2805	1350
W. B. Prescott	2819	1358
E. F. Vogel	2835	1368
J. J. Kerr	2848	1375
Abner Lunsford	2850	1377
T. F. Gehle	2873	1391
Wm. E. Carnegie	2897	1405
H. F. Perkins	2901	1408
John D. Battle	2932	1426
Walter D. McKinney	2935	1429
John W. Leb	2948	1436
W. R. Addicks	2974	1454
W. L. Pepperman	3000	1469
M. S. Sloan	3010	1474
Van A. Bittner	3012	1476
C. A. Rice	3026	1486
Arthur N. Payne	3031	1487

Appeal papers in Pocahontas Operators' Association et al. *v.* Public Service Electric and Gas Co.—Continued.

	Original	Print
Narrative statement of testimony, etc.—Continued.		
Testimony of Charles O'Neill	3033	1488
W. L. Hammond	3095	1525
John Marland	3105	1531
H. B. Tyree	3111	1536
William B. Ord	3115	1538
T. F. Farrell	3118	1540
A. R. Yarborough	3122	1542
S. C. Higgins (recalled)	3124	1544
Statement re exhibits received in evidence in hearings before Interstate Commerce Commission	3131	1547
Guthrie Exhibit 103. Statement giving statistics for bituminous and lignite mines in the entire United States, year 1922	3160	1568
Bronson Exhibit R. 54. Statement giving statistics for bituminous and lignite mines in the entire United States, year 1922	3223	1620
Designation by appellants of parts of the records to be printed, cases Nos. 709 to 712, inclusive	3230	1627
Designations by appellees of additional parts of the record to be priated, cases Nos. 709 and 710	3233	1628
Statement of points to be relied upon by the United States, No. 709	3237	1631
Statement of points to be relied upon by the Interstate Commerce Commission, No. 709	3240	1633
Statement of points to be relied upon by the United States, No. 710	3243	1634
Statement of points to be relied upon by the Interstate Commerce Commission, No. 710	3246	1636
Statement of points to be relied upon by the United States, No. 711	3249	1637
Statement of points to be relied upon by the Interstate Commerce Commission, No. 711	3252	1639
Statement of points to be relied upon by the United States, No. 712	3255	1640
Statement of points to be relied upon by the Interstate Commerce Commission, No. 712	3258	1642
Statements of points to be relied upon and designation by appellants of parts of the record to be printed with proof of service, cases Nos. 713 to 716, inclusive	3261	1644
Orders extending time	3271	1646

A. W. POLLOCK, called as a witness, and having been first duly sworn, testified as follows:

Direct examination by Mr. BALLARD:

2025 I live in Ramage, W. Va., and have charge of the mining operations of the Spruce River Coal Company, being vice president and general superintendent. I am a stockholder and also a director of the company. I have been in charge of its operations since March, 1917. I have been engaged in operation of coal mines about 27 or 28 years and was in charge of operation of some metal mines about 5 or 6 years in addition. (1234) The Spruce River Coal Company owns and operates the following mines: No. 2 at Ramage and Nos. 3, 4, and 6 at Jeffery, about 1½ miles from there. My connection with the properties includes only the operation. We have received assigned cars at mine No. 3. 1235) That was during a period beginning January, 1918, and extended on partly through 1918. I don't remember just when it stopped. We were starting a new mine and wanted assigned cars for development purposes. We were not on a rating but got what cars we could load. No. 4 and No. 6 are receiving assigned cars now for development purposes. Except for development purposes, our mines have never received assigned cars. The Boone County mines in our vicinity have received assigned cars in excess of their pro rata share. There were 12 of these mines, but I think there are only about 5 or 6 in operation at the present time. There were 5 of them assigned at one period. (1236) I think these mines are about eight miles away. The Boone County Coal Corporation operates them. The C. & O. mines on Big Coal River have received assigned cars while we were on commercial coal and then there are some other mines that received assigned cars. The C. & O. mines are at Dorothy, Sarita, and Eunice. I suppose they are owned by the C. & O. Railroad. They are run by a corporation called the Western Pocahontas Coal Company. During times when we have been on short car supply and these other mines have received assigned cars the
2026 effect has been to decrease our running time. I can not give the extent in days per week, but I took a period of March, April, and May, 1920, for a comparison basis and figured that we lost 2,131 tons during April, 1920, and 1,746 during May, because of the assigned cars that were taken away from us, from our loading. (1237) That is to say, an equal distribution of all cars would have enabled us to produce that much more tonnage in each of those months.

By Examiner BARTEL:

I do not think the switchmen's strike came on until June. I did not attribute that at all to the switchmen's strike.

By Mr. BALLARD:

Those figures cover mines No. 2 and No. 3. The mines at Spruce River having assigned cars then were the Boone County, the C. & O.

mines on Big Coal, and the Mordue, and then several mines in the Logan field, and mines on the Kanawha and, I think, New River and, in Kentucky, the Eastern Kentucky. We did not have assigned cars. (1238) As to the effect on our labor, these two months in particular we had lost a great many men and were put to considerable expense to recruit our force, and we were obliged to adopt the bonus system for keeping the crews of men. In March I had an average of 82.3 men at my two mines, and in May, in spite of spending considerable money on recruiting my force and bringing in several men I only had 67.4. During this period I located 17 of these men that had gone to the Boone County Coal Corporation which was receiving assigned cars. To recruit our labor force I employed a labor agent and sent him out to pick up men and then we offered men a bonus of their share, 10 cents per ton, for all the coal produced during the year, beginning April 1st. That was prorated among them according to their earnings and only given to those men that were with us at the end of the year. I carried out that scheme throughout the year. 1239) We were not able to get
2027 all the labor we needed. As to the effect of our short running time on our cost of production, the increase in cost chargeable to the decrease in production was 71 cents in April, and 55 cents in May. Those figures represent the actual cost to us that was occasioned by the decrease in production below March. March was not a full-time month, but we worked 116 hours. It is much more than an average month for us on the C. & O. We worked 72 and three-eighths hours in April and 74 in May. Our tonnage was reduced to 9,495 in May. If we had received our full proportion of cars our expense would have decreased 12.5 cents in April and 12.4 cents in May.

By Examiner BARTEL:

That is per ton on the entire production. That is about $2,902 08 for the two months.

By Mr. BALLARD:

That is the cost to us of producing coal on account of the failure of the C. & O. to distribute these cars ratably during those two months. As to labor difficulties growing out of the assignment of cars to other mines, it takes us a long while to recruit our force and get trained men to take their places. It affects the reputation of our mine in the labor market. (1241) We rely a good deal on recruiting our force from the good will of our men and they, to a certain extent, help us to recruit our force. If we make a record of poor running time we do not get the results from that that we naturally would want. Men coming to our place looking for work the first thing they ask about is our reputation for working steadily and if they find that a mine above us or somewhere around us has a better reputation than we have, they go to that mine. As to the effect on the ultimate recovery of coal in our operations of short

running time due to assigned cars, it aggravates a very serious condition. All of the mining operations in southern West Vir-
2028 ginia practically are carried on in the room and pillar system. It is customary to drive entries in the rooms and then recover the pillars. In a great many mines it has been necessary to work out the entries in the rooms and leave the pillars stand; then make a job of recovering all the pillars in the mine. It is almost an impossible proposition to recover pillars (1242) if you do not work at least four days a week. I am now experiencing a difficulty in No. 2 mine in recovering pillars where I am only getting one day a week. That has something to do with the amount of coal that we are able to get out. The coal in the pillar is lost forever. As to a choice between assignment of cars on an output contract basis over a long period and the assignment of cars from day to day with commercial cars given the same mine on other days, I should think they are both equally bad from a labor standpoint. I do not see that there would be any choice from a labor standpoint. As to the effect on the cost of the commercial mine of assigning cars under output contracts for long periods or from day to day, my cost would be a great deal more than his cost would be. (1243) He has a full car supply and his cost would probably be the same and he would be able to undersell anybody else that does not have a full car supply on the market. That is to say, if he is in the commercial business at all. As to development and recovery of pillars, I do not see any difference, from my point of view, between these two methods of assigning cars. I am in touch with the commercial end of our business only in a general way. As to a choice between the two assigned car methods, I should say that the mine receiving assigned cars part of the time and on the commercial market the rest of the time would be at a great advantage over a mine that did not have the assigned car. If assigned cars were eliminated and there were an equal pro rata distribution of all
2029 cars among all mines, the situation would be improved that much and we would not have the labor troubles that we have been speaking of. To illustrate that: We have been working under very serious car shortage since along in September. The mines that I have been speaking of in my immediate vicinity are non-union mines. Our mines are organized mines. My men would not go to those mines and they have been staying with me, although our car supply has been the poorest we ever had. Since September we have hardly had a percentage of commercial distribution over 26%. I received one supply last week one day about 16⅔%. Mines have not been running their full time on assigned cars. They are running full time in the Logan field and at other assigned mines. (1245.) The Boone County mines are not working. They do not have railroad contracts now. They are on the commercial basis, and receiving the same running time that we have had. I would think that their railroad contract expired in June.

Cross-examination by Mr. BRONSON:

My figures, showing that I lost approximately 2,000 tons in April and approximately 1,746 tons in May, due to the use of assigned cars of the C. & O. were not based on 100% car supply. I divided (1246) the number of tons I produced in April by the per cent of car supply to the unused mines in C. & O. fields, and I multiplied that by the per cent of the total number of cars that were supplied of the C. & O., and I subtracted the number of tons that I produced from that proportion. That gave me 2,131 tons. As to whether this takes in private cars, the basis of this is the C. & O. The loss I calculate is between the daily number of coal cars. If we received the full proportion of the available cars, our cost per ton would have decreased 12½ cents in April and in May 12.4 on the same basis. (1247)

2030 Those figures are based upon my ratings only in so far as they affect my production. My opinion, from what information I have, is that my men will get disgusted with the supply of cars we are getting, knowing that the other mines in the district are getting a full supply. They will quit my place and go to mines that are working full time and try to get work there. If they are not able to get work there, they will keep on drifting. I do not charge the entire loss of production in the months I referred to to loss of labor due to assigned cars. One other cause is decrease in car supply. I have plenty of men to produce all the coal I produce. (1248) I have been working since September, 1922. I do not think that the Dorothy, Sarita, and Eunice mines of the C. & O. are working steadily. I do not know of any men that we have lost since then to Dorothy, Sarita, and Eunice. I do not think that there are any mines in our coal district—Coal River—getting assigned cars now or recently. I understand these three fuel mines are not receiving assigned cars now. I do not understand that they are trying to work. (1249) When I was paying bonuses I do not think that all or most of the other operators were engaged in the same practice. I was the only one I know of.

D. H. MORTON, called as a witness and being first duly sworn, testified as follows:

Direct examination by Mr. BALLARD:

I reside in Charleston, W. Va., and am general manager of the American Eagle Colliery, located at Ameagle, and of the Levale Coal Company at Levale. The Levale mine is on the Clear Fork extension of the Cabin Creek branch of the C. & O. I and my family connections own about 50% of the Levale Coal Company. I have general supervision of the operating, or, rather, the selling, as

2031 far as marketing of the production of this mine is concerned. I have been operating that mine since August, 1919. Prior to that time I have had charge of mine operations since 1903 as superintendent of operation. I have been manager of mines since about 1913.

2032 (1251) I am financially interested in the Ameagle Collieries Company. Their mine is located at Ameagle, on the

same branch as the Levale mine and about eight miles [away]. Neither of these mines has ever received assigned cars for railroad fuel. Between the Levale mine and the American Eagle mine on the same branch are located the Dorothy and Sarita mines, owned by the Chesapeake & Ohio Railway. The Eunice mine is about two miles from the Levale mine in another direction. The Mordue mine is located by rail about three miles from the Levale mine. (1252) They received assigned cars during part of May, 1920, and also, I think, part of 1921. And during the other portions of those years commercial cars. That is not a railroad mine. It is owned by the Mordue Collieries Company. I do not think it is shipping any railroad coal now with assigned cars. During the time that I am testifying about the Dorothy, Sarita, and Eunice mines did not receive assigned cars all the time so that they had the full run. I think it was the first of April, 1920, or about that time, that they commenced receiving assigned cars. I think they received assigned cars from then up until the time they closed the mine down on account of not needing the coal. That was through the 1920 car shortage and into 1921. As to the periods when the three C. & O. mines and the Mordue mine received assigned cars and I did not, I am not prepared to say (1253) that all of our loss of time was due alone to the assigned car practice. In the month of January, 1920, when they were on equal distribution with us at the Levale mine we worked 14⅝ days, or 54 per cent of full time; February we worked 10⅞ days, or 43 per cent of full time; March, 11⅞ days, or 44 per cent of full time. During the months of April, May, and June of the same year we worked an average of 8⅓ days. That is taking the three months in the aggregate. There was not very much difference. They were receiving assigned cars during all that time. I have not the exact figures, but they were practically full, if not
2033 entirely 100 per cent, running time. I have made a comparison as between January and May, in which I show in January, 1920, we produced 7,483 tons at a cost of $2.34 per ton. In May we produced 5,191 tons at a cost of $3.05, an increase of 71 cents a ton. (1254) On April 1 we gave a labor increase amounting to practically 25 cents a ton, which represents a net increase of 46 cents per ton, due to the loss of time, short car supply. I have no other cost figures before me from our operation. The effect of this short running time on our labor problem was a very serious one. On January 1st we had 36 loaders. A loader is what is called a miner. He is a man who is an independent contractor and works or not, as he sees fit. I have used the loaders for the purpose of my figures because that is the basis which the railroad uses in allotting cars (1255) under the C. & O. rating system. On January 1st, 1920, we had 36 loaders working. During the month of January we employed six, and the same number quit, leaving us the same. On March 16 we had 41 loaders working. On May 1st, thirty days after the railroad mine started receiving assigned cars, we had thirty-

six loaders working. During the month of May we employed 3 men and lost 11, leaving us 28 loaders. In June we sent to another field and imported 16 men to help replenish our force, and continued to employ such men as we would get hold of during the year, but at the last of the year we only had 30 loaders employed. I have not with me the details for the remainder of the year. (1256) The labor turn-over continued just about the same. I just took the last day of the year to figure what our net loss had been; that is, 12 men out of 42, after all these efforts I made. The labor situation has a permanent effect on our business. We are suffering from it right now. The fact that the C. & O. mines, located so close to us, are running normally full time, with our mines idle, causes a dissatisfaction and an unrest among our men that leaves us with a bad reputation for our running time. As to the effect on our sales department, in 1920, when we had these difficulties with car
2034 supply it took practically all of the cars that we could get to fill our contracts. It left us no coal to go on the market with and build up new business. It left us dissatisfied customers on account of delays in filling orders. Another item that entered into it was the fact that hopper (1257) bottom cars were assigned to the C. & O. mines, and there were a number of times that we had orders calling for hopper bottom equipment that were cancelled on account of our inability to get equipment. Cars are not being assigned to any other mines in our district to-day that I know of, unless they have commenced to assign cars to the Chesapeake & Ohio mines within the past week. We have had four supplies, or nearly four supplies, this month. [November.] That means four days. That represents what the commercial supply has been. I think that possibly our supply is a little ahead of the average of the field at that. No cars are being assigned, so far as I know, in our district. They are assigned in the Logan district, to the Island Creek mines. (1258) Those are independent mines with which the C. & O. has output contracts, and I am informed they are getting a full run. The Dorothy, Sarita, and Eunice mines were not receiving assigned cars a week ago. There is no showing of them on the distribution sheet with any rating at all, but they are giving them somewhere near the average of that district. I have been told that the reason for that was the labor condition. We have just been fighting a strike, and I believe that the railroad officials were not desirous of upsetting labor conditions just at this time. I have also been told that it was because they had a certain amount of tonnage to take from the Logan field, and they continued to take the full run from the Mallory and Island Creek mines although they do not need a full run from their own mines. That is the situation to-day. (1259) As far as we are personally concerned just now, the assigned car is eliminated. We do not feel so keenly the assignment of cars in a field that is foreign to us as the Logan field. I can say that under the present car supply in

the C. & O. field, if it continues, and the C. & O. assigns cars
2035 to their own mines and continues to do so, it would bankrupt us inside of six months. I was told by the manager of the C. & O. mines about three days after they started up, after the strike last month, that over half of our men at our two mines, which adjoin him, had applied to him for work, presuming they were going to have 100 per cent run. Whether or not the Dorothy, Sarita, and Eunice mines were owned by the C. & O. or had output contracts with it, it would be the same situation, so far as the effect upon us.

Nov. 21, 1922.

2036 "Mr. Ballard. If the Commission please, I have here a (1262) statement which is a compilation taken from two of Mr. Gutheim's exhibits, those relating to the use of assigned cars and to the ownership and production of coal by railroad lines, and together with that, the information contained in the appendix to the commission's report on the cost of railroad fuel, reported in 61 I. C. C. 71, and also certain information taken from the Geological Survey's publication called 'Coal in 1918.' * * *."

The statement referred to was offered and received in evidence as Exhibit No. 52.

Cross examination. Mr. Bronson: (1264)

I gave figures that in January, 1920, our mines worked 54 per cent of full time—full time being six days a week—in February, 43 per cent; in March, 44 per cent; in April, May, and June in the aggregate an average of about 30 per cent. And that during April, May and June the C. & O. fuel coal mines, Dorothy, Sarita, and Eunice, which lie near to our mine, worked full time. The six days a week applies to the men. I would not like to say that every man we had worked six days a week, because it would be very unusual if they did. I do not mean to say that the individual loaders or miners at the C. & O. fuel coal mines, worked individually six days a week, either. I should say that there was no individual miner or loader that worked less than four days a week at (1265) one of those mines. They worked less than four days a week at our mines, because we did not have the cars. I do not have a record of the time individual loaders worked at the C. & O. fuel mines. I could not say whether we obtained our pro rata share of the unassigned equip-
ment in April, May, and June from the C. & O. Our per-
2037 centage of running time should compare with the percentage of car supply. I stated that in January, 1920, we produced, I believe, 7,483 tons of coal at a cost of $2.34 a ton and in May, 1920, we produced 5,191 tons at a cost of $3.05 a ton, and as between May and January, 1920, there was an increase (1266) due to advance in wages of about 25 cents a ton; in other words, there was a difference between the costs for those two months of 46 cents a ton. That was chargeable to the fact that the C. & O. used its own cars at those fuel mines, and was due to the car shortage. The car shortage was

primarily responsible. The assigned cars at neighboring mines contributed to the increased cost on account of lack of efficiency due to the dissatisfaction among our men. As to the percentage of car supply in January, 1920, I know nothing more than our working time was a little better than half—fifty per cent car supply. (1268) As to the percentage for May, the C. & O. bulletins show that information monthly, but I do not have them here and do not know. I did not make any calculations as to whether if the percentage of car supply in May was less than it was in January, the $3.05 cost figure for May for 5,191 tons of coal might be lower than the $2.59 cost in January for 7,483 tons, taking into consideration the loss in tonnage due to the car shortage. The figures I gave of the number of loaders employed in 1920, beginning in the month of January, with 36 loaders employed, are the figures for only the Levale mine. I did not take into consideration the American Eagle Mine, for the reason that that mine was on the Baltimore basis at that time. (1270) I would not say that the loaders at the C. & O. mines, the individual loaders, will load more coal per day than our men load. I do not think our men are more efficient. I think that the comparison of the men would depend entirely upon the mining conditions—it would be a question of which was the more efficient mine more than which were the more efficient men. It is true our Levale mine has a very good reputation for general working conditions, one
2038 of the best in the district. I do not know whether or not the C. & O. fuel mines employed relatively more loaders or more men to produce the same amount of coal that we did. (1271) Dorothy is three miles east of Levale; Sarita is half a mile east of Dorothy, and American Eagle is three miles east of Sarita. The injury that the assigned cars to the C. & O. mines do to us is, first, that they take our men during times of extreme car shortage if they need them; second, the men that they do not take are dissatisfied because our men seeing the neighboring mine working every day and we working only one or two days a week, feel we are the exception. They cannot understand why a mine within sight of them should be running every day and we only running one or two days a week. The result is that they leave us if they cannot get work, and go to Dorothy or Sarita or Eunice. They move on somewhere else, expecting to find better conditions. (1272) If the Dorothy mines run four days a week and we run four days a week, there is no difference.

JOHN BROPHY, called as a witness, and being first duly sworn, testified as follows:

Direct examination by Mr. KINTNER:

(1273) I am president of District No. 2, United Mine Workers. Our headquarters is at Clearfield, Pennsylvania. The district embraces about fourteen counties in the central western portion of the State and extends from the New York line to the Maryland line. It includes all the counties in that section or strip down there. Approximately 60,000 members of the union live and work in that

district. There are three principal railroads in the district, the Pennsylvania, Buffalo, Rochester & Pittsburgh, and the New York Central, and there are a number of smaller lines. The main line
2039 of the Pennsylvania runs through the district, and there are a number of branches. (1274) No complaint has reached me direct as to distribution of cars by the New York Central. The principal complaint has come from the miners employed in mines located on the Pennsylvania main line and its branches in our district. Our district is divided into nine territories for administrative purposes. Territory 3 is located on the Pennsylvania main line. The main grievance comes to me from territories 1 and 3. Territory 3 is on the main line. Territory 1 is located north of the main line or on branches of the Pennsylvania Railroad, which supplies most of the cars for those two territories. Somewhere between seven and eight thousand miners work in territory 3, and between six and seven thousand in Territory 1. Since (1275) the signing of the Cleveland agreement, work has been very slack, about two or three days a week, on the average, is the reports we have been receiving. They come to the office, that is the headquarters of the district, every two weeks. As to the cause of shortage of work, car supply is the complaint, car shortage. That is the complaint from nearly all of the mines in our Territories 3 and 1. We have a rule between the operators and our associates as to the distribution of cars inside the mine. The rule provides for what is known as a square deal inside the mine; that is, it guarantees equal opportunity of work to the men who are employed in the mine on a tonnage basis. That rule has been a part of our district contract since 1910. With the assigned cars eliminated that would be the same condition in the mines all through our territory. (1276) We are contending for equal opportunity for work for the mines, just as we contend for equal opportunity for the miners in the mines, the car supply inside the mines. Our objection to the assigned cars is that it does not work the same on the outside as it does inside the mine. Further, giving a special privi-
lege to some one mine or mines to work steadily makes for a
2040 great deal of floating about on the part of miners, chasing after steady work, and it is a disturbing element within the district. It does not permit men to get rooted in the different communities of life, because just as soon as they hear of steadier work at some other mine they pursue the chance of steady work, and the result is that there is a greater labor turn-over and a greater disturbance in the community life of the miners than should be if there was an equitable distribution of the car supply. Mines that have assigned cars can work nearly full time, while the mines that do not have assigned cars can not. (1277) I understand there are several places in our territory where they have that practice or privilege of assigned cars. As to whether there are any complaints from miners employed at those mines, we have complaints particularly from the miners who are working at mines near-by and are working

short time. They resent some one mine getting a hundred per cent of car supply and other mines getting thirty or forty or fifty per cent of car supply. We received a number of letters from different local unions complaining against the assigned car system.

Cross-examination by Mr. BRONSON:

My information is that the assigned car is in effect at the operations of the Logan Coal Company at Beaverdale, Pennsylvania. There are a number of others. (1278) I understand that the mines of the Tunnel Coal Company at Gallitzen have assigned cars. I do not think those assigned cars are mostly private cars. Not in that case. For instance, the Berwyn-White Coal Mining Company, who operate in that district, have privately owned cars, and as a rule they work steadier than they otherwise would if they were depending upon the line cars for their share of cars. In some instances the miners may work six days a week in an assigned car mine, but in others they may not operate the full six days. But they do get a greater amount of working time due to that mine being
2041 privileged in car distribution. They take it, of course, if they are given the opportunity. As a general proposition the individual miner works six days a week where he has the opportunity to work six days. (1279)

By Commissioner AITCHISON:

As to the anthracite field, I am not familiar with conditions there, but I say that the condition of slack work with here and there spots that are privileged to work steady time, creates a large labor turnover and restlessness and general dissatisfaction that are not regular habits, because one week they work four or five days and another week they may work one or two days. The very irregularity of the work is disorganizing of regular habits and prevents the miner from acquiring the habit of regular work. If there were no assigned cars I do not think there would be enough additional cars so that all mines would be able to run full time, but I do believe it would reduce the cause of a lot of friction if there was equality in the car service the railroads could give to the mines. I am not prepared to say how much added work it would give. I have no idea, and could not say whether it would add as much as half a day a week. But from our point of view (1280) the very fact that even only a few mines are privileged to work steady is the cause of friction and dissatisfaction among our own people because they stand for the principle of an equal distribution of work opportunity. I would want this principle of equality that I speak of to be country-wide. As to whether the country could have absorbed 19,000,000 tons of coal a week, it could not, or anything like it. (1281) I am not holding out the hope of full time under present conditions, but I am contending for an equal distribution of whatever work opportunity there is, and that car supply should not be used to favor one set of shippers or one set of

miners as against another set of miners and another set of
2042 shippers. I recognize that under present conditions we could not expect full time. I think our men recognize that. We have tried to put the idea across of over-development to a very large degree of the bituminous industry.

By Mr. BRONSON:

There may be other causes of irregularity of work as between individual mines, but they are minor to the general cause of inequitable car distribution. I think they cancel one another—the other causes. As to a railroad's securing its fuel coal at its own mines through the use of its own cars at will (1282) I think that the railroad ought to be placed on the same basis as any other consumer. I think railroads are entitled to their coal supply just as every other consumer is.

By Commissioner AITCHISON:

The railroads load some coal direct onto the locomotive without the use of a car at all. I would not think it a surprising amount in the aggregate. As to whether I have objection to their working full time if they did not use cars at all, but loaded direct from the tipple onto their tenders, I think that is a question that I do not think is really possible of answering. I do not want to take a position
2043 that unnecessary costs should be added onto the railroad. (1283) If a railroad could load every pound of coal that they use from the mine tipple into their locomotives without the use of a car, all the producers in so far as it were possible, ought to be given the opportunity to supply coal to the railroad. I would not let the railroad own its own mine and load its own coal directly into the tipple and from the tipple into the locomotive if it is going to be to the disadvantage of every other shipper. Assuming that the railroad is not getting a car but loading its own coal (1284) direct from the tipple, working its mine with as small a force as is possible, and giving the men steady employment, my only objection is that I am trying to secure for our people recognition of the principle that there ought to be equal opportunity in working time given to all miners. I recognize, however, that the system [assumed] would not interfere with the car question and the probabilities are that where that is the case it would work for a greater use of railroad cars among those mines that did not dump the car right into the locomotive. As a temporary measure it might be justified, but as a matter of principle I would like to see the greatest equality of working time. I would object to more time at the railroad mine using as few men as it could and using no cars at all during a car shortage period.

By Mr. BRONSON:

(1285) I would object to it because it would give the railroad mine more working time than other mines. However, as a matter of contract relations between the United Mine Workers and such

operation we would have no right to interfere. I am just offering objection as a matter of principle in trying to secure an equitable distribution of work opportunity.

2044 By Mr. CARMALT:

I am an advocate of equalizing the working opportunity among all the miners of the country. We are not getting five days a week now.

By Commissioner AITCHISON:

We are advocating five days a week.

By Mr. CARMALT:

That is the same general theory that I have suggested here of equalizing working time.

By Mr. BRONSON:

(1287) There are a considerable number of miners or men employed in the mining industry in excess of the actual requirements based upon the production this country needs but not under the present development. There are more men employed now than would be required to actually produce the coal that is needed in this country. More capital employed, too.

DAVID COWAN, called as a witness, and being duly sworn, testified as follows:

Direct examination by Mr. KINTNER:

I am board member of three in district No. 2 of the United Mine Workers. The largest membership is directly along the Pennsylvania Railroad. If my territory (1288) had the Berwyn-White it would mean Somerset, Cambria, Blair, and a little portion of Indiana County that is in my territory. Kelisel is in Somerset. My territory is the largest in district No. 2 of the United Mine Workers. I judge the number of men who are members of the union in that territory is about between nine and eleven thousand. We have two operations that have been newly organized in Somerset, Kelisel, and Carpenter's Fork, which are not included in Mr. Brophy's esti-
2045 mate of the men in the territory. Counting all the small operations I would judge there are approximately three hundred operations in our territory and nearly all are union operations. They contract between the operators and the miners' union. As a board member I visit different mines of the territory often. (1289) I am on the job every day. I know something from my own personal knowledge of the conditions existing in each mine. I received instructions from President Brophy to get statements from the different mines as to the working conditions; that is, as to time. The men at the various points complained of being awfully poorly worked, and I reported to our president, and then he asked me to make a statement, to send a letter out so that it could be read down here before this body. I sent forty-six of those letters out and received

replies. I suppose about eighty-five per cent of them corresponded. (1290) I do not know how many replies we received; there are some that I did not bring along. These letters were received mostly from check-weighmen. The check-weighman is the man who keeps the tonnage day by day from each of the mines and knows the number of days that the men work and also the tons per day. He sends that report to the secretary of the district. That information I received outside of my personal knowledge was largely from the check-weighmen. (1291) From my personal knowledge and from the letters I received I should judge about two days and a half as being the average number of days that the mines worked in our territory since the signing of the Cleveland agreement, taking one with the other. I know of one large company in our territory that previous to the strike had nine hundred fifty men on their books and did not work a day one week, and then we have other mines that worked three hours a day, four hours a day—broken time. Added together it would
2046 average about two and a half to three days a week. The mines report to me that there are lots of orders. The cause of the short time is the shortage of cars. That is the complaint that I receive from the reports of the check-weighmen and from my personal knowledge of the mines. As to whether any of the mines I refer to have any assigned cars, we have one mine (1292) that we call Bend's Creek that owns, I think, about twenty-five private cars, so one of the owners told me, and they have not lost a day to my knowledge up until week before last. We have a mine in Blair County called the Penn Central Coal Mining Company. It has private cars. They furnish coal for themselves. It has been working practically every day. The Logan mines were working a little poorly for a while, and then they started to work very regularly. I cannot swear whether they have assigned cars or not, but the have been working very regularly. We have another mine at Gallitzen. It is called the Taylor-McCoy. They do not load any coal. It is put into coke. They work steadily. They have another operation that we call Glenn-White under the same operation that has not lost a day since they have started up. Then the Tunnel Coal and Coke Company, they furnish coal to the railroad, and they had worked a little poorly (1293) for a couple of weeks and then they picked up and worked very good. The check-weighmen reported to me the week that I came down here that they worked every day that week and also loaded three cars at their bin, that is, flats—something that has not been done for years. The check-weighmen wanted to know what was the cause while the other mines are running irregularly. That is about the most that I know of in my territory that is working steadily with the ex-
2047 ception of another mine there that we call the Coalport Branch, Fallen Timber. It has been working regularly and other mines all the way up along that branch there have been working only about two and a half to three days a week. I would judge all these mines that I have named when they work steadier than the other ones have either assigned or private cars. All the other mines

in our territory which are not working full time are short on account of the lack of cars. As to the effect upon the men in our territory who work in mines not having assigned or private cars, speaking of this large mine that I was talking of, in the vicinity of Portage, that had nine hundred fifty men, the superintendent was telling me I think about three weeks ago (1294) that he could hire at least two hundred more men. It was owing to the slack work that the men drifted away and went to the more steadily employed places. It is the case over all the whole entire territory. Our mines where they are working so slow do not have the same number of men as they did have. The average wage of the coal digger per day varies owing to the difficulty. Our miners, I would judge, do not average $4 a day. Our day wage rate is $7.50 for drivers, $7.60 for motormen, $7.50 for spraggers, timbermen, rockmen and so forth like that. Tipplemen vary. When these mines have no cars all the men, both the day men and the spraggers and all the others have to quit work with a few exceptions where necessary work has got to be done. As to the loss in wages to the nine or eleven thousand men we have in our territory on account of lack of cars, I made a kind of an estimate once three or four weeks ago. (1295) I judge that they are losing approximately $6,000,000 a year in wages.

The letters referred to were offered and received in evidence as Exhibits Nos. 53 and 54. (1296)

2048 Cross-examination by Mr. CARMALT:

My judgment is that the greater number of mines that are operating steadily of which I complain are operating on assigned or private cars. (1297) As to relieving the situation brought about by the assignment of those cars, I feel that each man should have an equal opportunity of getting a square turn. As to the private car, why shouldn't it be divided up? I do not think it is fair. Of course, I am only stating my own opinion on that. If I have the money, then I can get my own cars and work steadily. I have taken up with the miners in those mines the question of dispersing those cars to other mines pro rata. They are all complaining. All those locals are continually complaining. The miners' local, in the mines where they are getting steady work, are not complaining. As to whether I make any distinction between the assigned car for fuel and the private car, I feel that each mine should have its pro rata share of those cars. We have members who are working in the mines which are getting assigned cars. (1298) We do not hear any kick where they are working steadily. But they know that it isn't fair. I guess approximately two thousand of our membership are employed in those mines. My district, I believe, is more effected by the shortage of work than any place else, because it is directly on the main line—the Pennsylvania line. The members who are employed in those mines are not more skilled men than our other membership. We are not confronted at the present time with irregularities as between mines brought about by the lack of orders for coal. (1299) Dis-

parity between orders causes complaint among our members the same as this does.

By Mr. BRONSON:

As to whether most of these private cars are from union or
2049 nonunion mines in my district, Bend's Creek mine, which is a little mine, has twenty-five of their own cars, and is a union mine. They have been working six days a week, with twenty-five cars. It is not large enough yet to have a check-weighman, so that means that it hasn't got twenty-five men. I have been up there taking care of grievances along the Creek, and at that time they had ten cars. I do not know where most of that coal goes. The twenty-five cars take care of it. The Pennsylvania dumps coal for locomotive tenders, not at Kittaning Point but South Fork and Gallatzin. They have another place called Park Hill, that coals engines. That is south of Connemaugh, coming east. I register the same complaint about taking coal at the engine tipple as Mr. Brophy. It causes the same trouble in working conditions.

By Mr. CURRY:

Concerning the divisions of the Pennsylvania Railroad in our district, we have one branch that goes up into Beaverdale, another up into Dunlow. The other branch goes up into Wynnborro, then down on that section out to the Coalport branch as we call it (1301), and then again we have another section that runs from Bellwood down to Berwyndale. That is my territory. We are east from Johnstown coming towards Altoona. The coal is all shipped from that territory into Altoona coming east.

JOSEPH DUGAN, called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. KINTNER (1314):

I work at the Wilmar mine of the Shoemaker Coal Company, at Lilly, Pa., in district No. 2. Lilly is about eighteen to twenty miles from Johnstown on the main line of the Pennsylvania Rail-
2050 road, about midway between Altoona and Johnstown. We pay taxes on three hundred ninety-four men at this mine, but there are men there who do not belong to the union, such as the weigh boss, boss driver, assistant mine foreman, and stable boss. The three hundred ninety-four are members of the union and pay dues. (1315) I started there in September, 1918. I am a miner and dig coal. The mine is divided into rooms, headings, and pillars. There are about two hundred twenty-five or two hundred thirty miners, that is, diggers of coal. The balance of men are employed as drivers, rock men, pumpers, and so forth. The mine is a pretty large mine, one of the largest in the district. (1316) After the Cleveland agreement was signed the miners at Altoona and Johnstown signed the agreement and went to work the next day, the twenty-fifth or twenty-sixth of August. I have been working

since. When the strike was settled we went to work and worked every day up until the eighteenth or nineteenth of September. Then it got slack. We worked about forty-eight hours the last half of September. The first half of October, I think it was about twenty-eight hours we worked, that is, two weeks. (1317) On the sixteenth of October they worked four hours. On the seventeenth they worked three hours. Then there was no work up until the twenty-third. There was a hundred per cent car supply up until October thirtieth. On the thirty-first they worked four hours. We had no work from that up until the sixth of November. On the sixth we worked four hours. That was the day of the explosion at Spangler. They didn't work any more until Friday of that week. I do not know whether it was on account of the explosion or not. A lot of men went to Spangler and they didn't have motormen and men to work the cars. The rating of the mine in which I work is 33⅓ steel cars a day now.

2051 (1318) We went in the mine lots of days and didn't get a mine car. Some days we did get a car for two men. Some days we would get four cars. The mine might get ten, twelve, or fourteen, sometimes sixteen railroad cars. It depends on the size of the cars. They were able to increase the rating about the fifth of November. They ran a hundred per cent up to the thirtieth of November, and our mine is the only one which kept up to the rating.

2052 (1319) As to why in that period I did not work a greater number of hours, they claimed that they were squaring up the turn. As to the percentage of cars since the 1st of November, they worked on the 6th of November. Then they worked a little bit on the 9th, 10th, and 11th. There was work on the 12th of November. That is the day I left and I do not know what they have done since. In the mine I worked in it takes a pretty good man to average $5.00 a day, that is keep it up. He may make $7.50 or $8.00 a day, but taking it on an average if a man makes $5.00 a day he has pretty good work. The day men are paid $7.50 in the mine. (1320) There are some mines where a man can make $7.50 as easily as he can make a day's work. There are mines where you can not do that though. Conditions in the mines cause that. As to my loss in wages owing to the lack of car supply, the first half of September I made pretty fair pay. Of course after five months' rest you can not work very much. We had just about got broken in and ready to go to it when they broke off the car supply. That condition affects all the men who work in the Wilmar mine, the day men as well as the men who work on a tonnage basis. As to what is a square turn, the check-weighman keeps what he calls a turn sheet. If one heading gets ahead of another he will notify the committee. He just goes to the superintendent or clerk and tells him a certain heading is behind another and says, "What are you going to do about it?" (1321) Last week we did not get any trips. We were ahead. The next day they left us working all day. There were only 12 men in that heading. On Monday there was no work and

they laid us off. We were ahead of our turn. That is done for the distribution of mine cars all the way through. That is what the organization wants, as far as the steel cars outside of the mine are concerned.

Cross-examination by Mr. BRONSON:

2053 There are reasons other than car supply that interfere with the operation of a mine. Those mines along the Pennsylvania Railroad are getting their power from the Penn Central Company. Sometimes the Penn Central is knocked out between there and the mine and that shuts the mine down. (1322) Anything that causes the mine to shut down, be it cars or other causes, affects my ability to produce coal.

By Mr. LIVERIGHT:

The only thing I know about the over-supply of mine labor in Central Pennsylvania is around the town I come from. There is an over-supply of men there, how much I could not answer.

By Mr. CARMALT:

We received 25 assigned cars at our mine one day and that is all we ever received. (1323) They do not work on cars sent for railroad fuel. The class of labor employed in our mine is as good as that employed in any other mines in the region which are working on private cars or railroad fuel cars.

JAMES B. NEAL, called as a witness and having been duly sworn testified as follows:

Direct examination by Mr. LIVERIGHT:

(1327) I live near Minersville, Pa., and am in charge of coal mines. (1328) I am president of the Sonman Shaft Coal Company located near Portage, Pa., on the main line of the Pennsylvania Railroad. The acreage that I have under control at that mine is about 3,500 acres. (1329) Two shafts contribute to one tipple and the slope to the other. Our veins will average about 3½ to 4 feet. They are the B vein and the C prime vein working the shaft and the E vein working the slope. When we are full handed we have about 850 men. I think in 1921 we worked steadily

2054 and the early part of 1922. (1330) We have a capacity of about a million tons a year. I can not tell just what our tonnage was, but I should say 800,000 tons or something like that we produced in 1921. Our experience as to working time since the miners resumed work in 1922 has been very miserable. I can not give the exact figures as to the proportion of time we have worked, but I do not believe we are making more than probably 40 to 50%, if that much. I attribute that to a short car supply. There are no contributing causes that I know of. If we had the cars we would work steady time. I think this short car supply has caused the loss of possibly 150 men as compared with our pay roll in 1921. (1331)

Those men have gone to the mine where they work steady time. That is, I presume so. The outstanding case of mines in our district which do work steady time, I think, is the Berwin White.

By Commissioner AITCHISON:

As to why they went to the Berwin White mine, they did that so they would get steady time. I believe the Berwin White was short of miners. In the Berwin case, as I understand the situation, they are working nonunion and as it is rather a strong union field in general, they are having difficulty to get men who could use all their coal and still have a union camp. I am afraid some of the union men went to work in the nonunion mine.

By Mr. LIVERIGHT:

The mine has a decidedly large constant up-keep that continues whether it is in operation or not. (1332.) That would consist of the salaried officers, the clerks in the offices, pit boss, the assistant pit bosses, pump runners, foremen, engineers, stable bosses, and men of that class who are there whether the pit works or does not work, and the superintendent also. I have made a comparison of our
2055 own costs for October, 1921, and October, 1922. In October, 1921, we produced 85,000 net tons at a cost of $2.51 per ton and in October, 1922, we produced 39,535 net tons at a cost of $3.14 or a difference of 63¢. There is always a large increase in cost when the tonnage goes down because we have fixed charges such as I have mentioned as to labor. In addition we have to feed our mules; we have to pay for power for ventilating our mines, and we have to pay (1333) for the general degradation which goes on whether we work or not. Whenever the tonnage is low as a general proposition your cost is high. As to other mines receiving preferential car supply, I am not out in that country very often and I do not happen to know to whom the cars are assigned. The Bethlehem Steel Company I know has cars. The Logan Coal Company I know did have cars. Those cars, of course, go to the pits of the people to whom they belong. Whether the Logan Coal Company have sold their cars or not I do not know. I haven't any idea how many cars the Bethlehem Steel Company own. I have seen their cars on the road many times. I am opposed to assigned cars. The only remedy I could suggest would be to have the Pennsylvania Railroad so equip itself as to be able to furnish cars to its shippers. (1334.) I think it should equip itself with cars sufficient to take care of pretty close to the peak production. That would be bad economically, I admit. At the same time we have to do it in coal mines. We have to equip ourselves up to the peak of the water and that means that during a large part of the year it is not used up to capacity.

By Commissioner AITCHISON:

As to whether a good deal of our trouble this year is due to motive power rather than cars, I mean motive power classification yards, and

whatever is necessary to actual production. I want this, not
2056 only for coal, but also as to other commodities. In an emergency if the Pennsylvania Railroad or any other railroad hasn't sufficient equipment, I should think that it would have to equip itself.

By Mr. LIVERIGHT:

As to even distribution of motive power with respect to assigned cars and privately owned cars (1335) I should think it ought to be done fairly. If there is a shortage of motive power so that all the cars on the division ready to move can not be moved then it seems to me that all the cars should be moved so that we can have them. The solution in my judgment is that they have 100% car supply and go ahead and buy the coal. I presume that they could on an 80% car supply or 70% or 50%. I do not know what the point would be, but at some point they could get all the coal wanted. I am talking about the situation where there is no assigned-car rule.

By Commissioner AITCHISON:

The case of the outlaw strike, such as in 1920, which ties up business at terminals, would be an emergency, and the case of the failure of foreign lines to return cars would not be an emergency, it seems to me. Under such an emergency I do not see anything to do but to take emergency measures. So far as the return of cars from foreign roads is concerned (1337) the chances are that they do not return them because they themselves are not sufficiently equipped. The same thing is true about using the equipment for road building materials and things of that kind. If there were sufficient equipment to take care of the business it would not be an unusual case. I fancy the demand for cars for road building material has tremendously increased in the last three years. There is a tremendous amount of road building. If the road has been completed and there is not the same necessity then for open-top equip-
2057 ment to transport the material to build that road that there was at the time that it was built, it is probable, it seems to me, that something else will begin when it ends, but if it doesn't, as I see it from a layman's viewpoint, we have a right to transportation for the stuff which we create on the line of railroad. (1338) I may be all wrong, but that is what appeals to me, and I do not believe that anything else will ever work out a solution for this grievous coal situation.

By Mr. LIVERIGHT:

I do not believe that in ordinary cases the Pennsylvania Railroad stores any coal along its lines.

By Commissioner AITCHISON:

We do not store any in the bituminous. We do in the anthracite.

By Mr. LIVERIGHT:

As to the practicability of storing our coal, we could put it down of course, but it costs like fury. So we have never stored it. If we did I do not think that we could get any more railroad cars at the mines to pick it up. If the railroad put them down for its own fuel supply, it would not take much equipment to move it. They would put it down comparatively near to the coaling point. I am familiar with the situation in the northwest on the Canadian Pacific west of Winnipeg. There, on account of irregularities, and especially bad weather, they do not put down a lot of storage, but they do put it down near their coaling points. So it is almost like a shuttle-car service. That would affect the supply of cars at the mines to an unappreciable degree, I should say. I do not think you could compare that situation with the present assigned-car system. The situation here is so much worse. I sell coal to the Canadian Pacific. I do not think it assigns cars. They do not rate up there, so it
2058 is pretty hard to tell. I think our pit in the northwest works just about as much time as other pits which supply fuel coal. I have an output contract. About 90% goes to the railroad and 10% to the commercial market. I think all the mines up there are working about the same time. They would give us cars—the Canadian Pacific—but we haven't the business for more than so many at a time. I should think that the additional revenue upon the additional freight moved would absorb some of the cost of storing. They would have that much more commercial coal moving.

By Mr. LIVERIGHT:

(1343) My testimony as to some of our labor drifting to the Berwin White Coal Company operation is just an inference. That is the story in the countryside, that they had gone to the mines where they were working full time. (1344) I have no knowledge of it myself. (1345)

Cross-examination by Mr. BRONSON:

As to whether I object on principle to the Canadian Pacific using its cars at will to carry coal from its stock piles during periods of car shortage to the points at which the coal is needed for engine purposes, I do not, to some extent, because the storage piles are very close to the point of use, the coal chute where they load the tanks. (1346) I should think that if they could store the coal hard by where they propose to use it, it would be all right. If they could not, I think then there would be a very great question as to whether it ought to take cars for that purpose. If the Pennsylvania put coal down near where they are going to use it and run a shuttle service, I think that would perhaps theoretically be wrong, but practically it would be right. I think I would object to the Pennsylvania, or any other railroad, digging its own coal and using its cars at will during periods of car shortage to carry coal to its engine points. I have no objection to its digging its own coal

2059 for its own use. I think if it is going to dig coal it ought to come in with all the rest of us. (1347) I think some of our men who left went to Berwin and to other mines where they have assigned cars. The reason was to get steady time. The Berwin mines work steadier day after day. I do not know anything more than just the current talk that the Berwin worked every day, and I know perfectly well that we do not. There is not an excess number of miners in our district at all times. Assuming no more production than would be needed to supply the consumers' needs, there would surely be a surplus of labor, because many mines would be idle if the others had cars. (1349) If Berwin had his full quota of men he would not have any use for any more men, but the chances are we would have less than our quota. I think that as the process would go along, he surely would take away the men from us. I think if we were working two days a week and Berwin working six, naturally some of our men would drift over to Berwin—up to the time he got up a full quota—and he would be draining from us. After he filled up, there would be no more drain from that particular quota. The difference in cost, shown by the figures I produced, so far as we were concerned, was apparently due to shortage.

2060 (1350) I think the assigned cars had something to do with the car shortage. It was car shortage that prevented our mine working. There were no changes in labor costs during that period. I do not think there was a car shortage period in October, 1921, judging from our tonnage, because that represented practically our full capacity at the time. As to the percentage of car shortage in October, 1922, I should say again, judging from the tonnage, in all probability we had about forty per cent cars.

By Mr. CARMALT:

As to my statement that the solution of this problem was that each of the railroads should equip itself with cars to take care of the peak load, or practically that, if they were all so equipped the market for coal would not be sufficient to keep a large number of them occupied a large part of the time. (1351) That would tend to drive down the selling price of coal and would tend toward requiring a higher level of freight rates to take care of the additional investment in cars. It would be borne, as I conceive it, by the whole country. As to my statement that our capacity output was about a million tons per years from these two mines, and in 1921 our output approximately eight hundred to eight hundred fifty thousand tons, the latter represented only about twenty per cent loss from capacity on account of no market or other conditions. I am not sure that at that time we had, perhaps, as big a capacity. (1352) We have been adding to our capacity. We have been gradually building up. In 1921 we were operating very close to capacity all the time. That was not the general condition in the coal trade. I think a good many mines were not operating up close to capacity, because they did not have the business. We were fortunate in having

orders that allowed us, so far as we were concerned, to work
2061 full time. That is where the element of salesmanship came into the situation and the quality of coal. We were fortunate in having a very excellent coal. As to our production of 1920, I do not remember enough about it to say. I do not think I said that the shortage in our region was rather occasioned by power shortage than car shortage, because I do not know. (1353) So far as we are concerned, we did not get the cars. That is all I intended to testify in regard to that. Exactly whether it is car shortage or power shortage or tracks, or heaven knows what, I do not know, but we did not get the cars. That is what I am very clear on. I have been operating in this field a good many years. I could not know at all whether there has been any shortage due to lack of power until this year on the Pennsylvania lines in that territory. I have no doubt that lack of cars or lack of power or lack of classification yards—dear knows what—have been elements in it at different times. I do not know what the elements have been. As to whether there is any difficulty there by having some branches of the Pennsylvania served with a fuller car supply than others, at the present time the region east of Altoona is being very much better served than our region which is called the middle region lying west of Altoona. (1354) I would not say there are plenty of cars east of Altoona, but I think they have had a very much better car supply than we have. As I understand it, the operating region of the Pennsylvania divides in the Altoona yards. We always speak of it in general as east of Altoona and west of Altoona. My mind is right on the main line, which is probably not more than five hundred feet from our tipple.

By Mr. BRONSON: (1355)

As to my caluculation in respect to my cost study for October,
1921, and October, 1922, the labor is divided up into ten or twelve different divisions. For instance, mining would be one of
2062 them. Inside transportation would be another item. And the men on the bottom of the shaft would be another item. Pump runners, the men on ventilators would be other items. They are classified according to groups. (1356) Depreciation, depletion, and general expenses are all included in this and are ordinary operating expenses; no overhead. Commissions to sales companies are not included.

By Mr. CARMALT:

I have owned private cars. We certainly did not find them a profitable investment, and were glad to sell them to Berwyn. It required a substantial investment to put in those cars. They cost a lot of money and we could not get enough wheelage out of them to pay. I do not remember, but I would say roughly they paid us probably three per cent when we were borrowing on five or six per cent on a car trust. If we had had sufficient financial strength to

have gone in and purchased cars up to 100 per cent of our requirements it would have been well worth while; in other words, to have supplied cars to take care of one hundred per cent of our capacity. (1357) I would say offhand it would have taken very much more investment than in the mine itself. It would take a lot of money and we did not have the funds to put into it. When we bought the cars at that time the rule of the Pennsylvania Railroad was that private cars did not count in the rating. If you were to get twenty-five cars and you got the twenty-five, and if there were ten of your own cars for delivery that day, you got ten. They did not count at all. I do not believe that the cars were hardly out of the shop before they changed that rule. I do not know who did it, but they counted in the rating, so we were hung up pretty tight. The owners of private cars to-day are under a greater handicap than we were at the time we bought them, but not the time we operated them.

2063 By Mr. CURRY (1358):

I have no personal knowledge on the question as to whether the railroads used the assigned-car rule to bargain with shippers to buy their coal and trade cars for low prices for coal. That is the talk of the trade that that is what is done. (1359) As to suggesting how a railroad could purchase its coal and provide for a period of car shortage without an excess purchase of fuel, the only thing I can see they could do would be to buy it and store it. Of course, I appreciate that would cost them a lot of money; at the same time the lack of cars is costing us a lot of money. I do not know anything about preferential contracts by which mines would agree to ship, say, twenty-five per cent of the output to the railroad and give them preference over any other shipments. (1360) As to making such a contract if it would be a percentage it might be all right, but if it was a fixed amount you absorb all your cars and the regular commercial trade would be without. I think it would be perfectly fair to give a railroad a certain percentage, just as you would give somebody else a percentage, but to give a railroad a definite fixed number might be pretty unfair to the rest of your customers. I do not think I would be willing, for example, to contract for twenty-one cars to be furnished to the railroad regardless of what the shortage might be. If there should be a shortage on the railroad of 33⅓ per cent, that is, 33⅓ per cent of our rating of 64 cars, the question whether I would be willing to load all our cars for the railroad under those conditions and give them preference (1361) is a little hard to answer off the bat. My thought would be this: That if all shippers did that so that all commercial customers knew
2064 it was being done, all right, we would go ahead on that basis; but if we did it and the fellow next door did not do it, why when we got sixty-six per cent cars or thirty-three and one-third per cent cars, and it all went to the railroad and the other fellow got the same number of cars that went to the commercial trade, it would put us in rather an awkward position. If everybody did it we

would be all fours on it. As to the practicability of that, as I see it now without giving it any thought, I do not like it.

Redirect examination by Mr. LIVERIGHT:

We do not have any trouble getting cars for fuel supply for the Canadian Pacific. (1362) As to our supply, we just have a little exchange of letters and they put in all the cars we want. For the past three or four weeks, or perhaps six weeks, we have been working on a basis of five thousand tons a week. We could get on it just as quickly as we chose and take it out in about four days. We have a little dribble of commercial tonnage and up there in the wilderness there is not much commercial tonnage. We have the C. P. R. supply cars, and as we increase our commercial tonnage, as we are trying to do now, I have not a doubt but there will be plenty of cars available for that increase of tonnage. I do not think they rate the mines up there at all.

By Mr. BRONSON:

The Canadian Pacific does not on a particular date take all our cars. The kind of coal we sell commercially is not the kind they want.

MALCOLM MCDOUGALL, called as a witness, and being duly sworn, testified as follows:

Direct examination by Mr. LIVERIGHT:

2065 I am superintendent of the Sonman Shaft Coal Company and am in charge at the mine. There has been an increase in its capacity to produce coal in the last few years. I would say approximately offhand our tonnage in 1920 was 700,000 and 850,000 in 1921. The first three months of 1922, prior to the strike, we mined about 225,000 net tons, then came along the strike. That was at the rate of 75,000 tons a month. We could very readily have kept that up had it not been for the strike (1364) from the fact that in March, in anticipation of the strike, we produced 89,950. March, 1922, the average for the month of the men who reported for work every day was 850. In August, which was the next month after work resumed following the strike, we had an average of 664; in September, 773; October, 690; and up to and including the eighteenth of the present month, 688. That is enough men to load the cars that are at present supplied us by the railroad company. (1365) We endeavor to give each miner in the mine a square turn. For the month of November we had in lieu of one hundred per cent car supply, just exactly 23.25 per cent. Beginning August 25, following the strike, and for the six days following we received a full one hundred per cent. For the month of September for the first five days we received a full one hundred per cent, and we closed the month with twenty-five working days with an average of 63.4 per cent. For October with twenty-five working days our average car percentage or allotment was 40.9 per cent.

By Commissioner AITCHISON:

Our rating from August 25 up to and including November 10 was 64.6 cars; from November 10 up to the present time and until the 10th of December our rating will be 65.1 cars.

By Mr. LIVERIGHT:

2066 For the month of November, on the second, third, fourth, seventh, eighth, and sixteenth, we received no cars. (1366) I think that is about the distribution for what is known as the central region. It is common knowledge that the users of assigned cars, including company fuel, foreign fuel, and private ownership, received cars on those dates, but that is rather out of my jurisdiction, and I have no personal knowledge on that point. As to the men employed by us constantly who must be paid whether the work goes on or not, we have mine foremen, assistant mine foremen, dumpers, watchmen, firemen, engineers, pay bosses, electricians, electricians' helpers, office men, outside foremen, and barn bosses. The constant cost per month in the Sonman mine, whether we work or not, are the items just enumerated, which include at least $2,500 which is our power bill to the Penn Electric Service Corporation when we are idle and nothing but our pumps are working. (1367) I am just speaking now of idle time. Including that $2,500, our total expense will aggregate between $13,000 and $14,000—$13,637.

Cross-examination by Mr. FLETCHER:

We had a very good car supply on the Pennsylvania just after the strike and that diminished gradually. (1368) I am not a railroad man, and I do not know whether that was due to the fact that cars were loaded up and shipped beyond the line and drained off the Pennsylvania to some extent. I assume perhaps that might have something to do with it.

B. E. NEAL, called as a witness and being first duly sworn, testified as follows:

Direct examination by Mr. BALLARD (1371):

2067 I live in Indianapolis and am operating the Neal Coal Company, which is owned by myself and my brother. I am a member of and a director in the Indiana Coal Bureau, which takes care of some of the operators in southern Indiana below the B. & O. R. R. That territory is served by the B. & O., E. J. & E., the Southern, the C. & E. I., the E. I. & T. H., and lines that are called the Evansville Traction lines. The E. I. & T. H. is part of the Big Four. My company operates Little mine in Pike County on the E. I. & T. H. or Big Four. (1375) Prior to my connection with the Neal Coal Company I was sales manager of the Indian Creek Coal & Mining Company, which handled the output of the Indian Creek mines on the Pennsylvania lines and the Little's and Blackburn mines on the Big Four, the latter two being owned and operated by the S. W. Little Coal Company. My present company is the successor of that company. There is not a full-car supply on the Big Four now in

our district. The Big Four is buying fuel coal in that district, and for the last three years they placed about a million tons per year on our division of the Big Four, the E. I. & T. H. division. It is my understanding that that is the approximate amount of tonnage that is now being purchased in the district. To my knowledge, they are using no assigned cars in the district. (1374) The manner in which they distribute their orders so as to receive all the coal they need is by negotiations for contracts with practically all of the operators on their lines. At present I think there are about twelve or fourteen mines down there. I think practically every mine in that field is now furnishing more or less tonnage to the Big Four. We are very much pleased with their method of distribution on railroad tonnage. It gives each individual operator a nucleus for stabilizing his
2068 operation, and at times it is quite an advantage in working off or dumping odd sizes of coal which we get in producing domestic coal, and these odd sizes, of course, are always satisfactory to the railroad for their fuel requirements, or else they would not take it. Just at present I only have a Big Four fuel order for eleven cars a week. I want more. (1375) We have been quarreling about that for the last three or four weeks. Our daily tonnage down there is about 40 cars a day. It just depends on the number of days we operate. We are now furnishing the Big Four eleven cars a week. That is a lower proportion than some of the other operators are furnishing. I think probably five or six operators are somewhere near my basis, and then there are some other operators that are securing a larger tonnage. I would say the mines in that district are capable of producing about some place between two and a half and three million tons per week based on a four-day-per-week car supply. The Big Four is buying at the rate of about 40 per cent of what production we could anticipate for a year of four days a week.
2069 (1376) As to whether the Big Four will get their coal in that manner, they have been getting it all during the past crisis. As a matter of fact some two or three weeks ago they had several of us cut down to 50 per cent of our weekly order. That only happened, I think, for a period of about ten days, but That only happened, I think, for a period of about ten days, but they have been securing all of the coal necessary under that arrangement. During April and the first part of May, 1920, the Big Four had not as yet placed the business and there were no assigned cars. During that time they were buying fuel coal on a railroad supply basis. I would say, on an equal car distribution. There was a car shortage at that time, a serious one. We were working about three days per week. The contracts placed in May were part output contracts based on assigned cars for the day's runs. (1377) A day's run was given to a mine and it was not charged as against the mine's rating. I think most of us down there in that field then got from two to three days. Our mine had two days' run a week on railroad coal. It worked out like this: Usually on Monday there was a full car supply because the railroad had had

Saturday and Sunday to accumulate cars, and we all worked on commercial coal on Mondays. Then our mine, the next two days, would give coal to the railroad, and if we got any further working time we would take on commercial. Just next to us there was another mine, quite a large one, that had a contract with both the Big Four and the Michigan Central, I believe. It had four days per week railroad coal. They would load commercially on Monday, and the remaining part of the week they would load coal for the two railroads. The Michigan Central is an allied line of the Big Four. (1378) When the Pike County mine, that is the big mine, once began taking our men, it began to hurt us. So I think it was along the latter part of July or August I went down to Cincinnati and asked the railroad if they could not give us some relief which would, in a way, equalize our running time with them, and they gave us another day's run per week. Then it made us three days per week, which they kept up to as best they could
2070 until service order No. 18 came out. The Pike County mine which took our men was operating four to five days per week on railroad tonnage. It was about 7 or 8 miles away from our mine. As an example of that competition in the labor market during April, Pike County had a total of 161 men, average, in their mine per day. In May they had 112 men. By August they had increased their men to 238, an increase of 77 men over April. (1379) During that same period we started in April with 229 men; in May, 230 men; in June we dropped down to 182; in August we had 209 men. We ended up in November with 207. So I lost between 20 and 25 men as an average. It really worked into our losing loaders, because if you lose day men, then you have to put probably more of your loaders on in day work because your day work has to be kept up. It really operates in our place so that you have to lose a good many loaders. During that period I lost about 20 and the Pike County gained about 70. The other men came, I presume, from other mines around the district that were not working as full time as they were. (1380) As to the effect on the morale of the labor that we had left, our men, of course, were dissatisfied. As a matter of fact, about the first of August we put our Blackburn mine, which was a smaller mine, on assigned cars with the Lake Erie & Western in order to protect our labor supply. They were getting away from us and we went on to assigned cars there and worked that mine practically full time, and the mine committee at Little's could not understand why they were only working about two or three days a week and the Blackburn mine was working six, and we had quite a little trouble explaining it. They were very much dissatisfied. It did not develop into any actual strike, but there was loss of time. Concerning what happened on the 1st of October, under service order 18, of course the mine could not ship any commercial coal and had to go on to a six months' period of railroad fuel. We have always been more or less a commercial mine, and we had some contracts at

the Little mine which made it impossible for us to go on
2071 to railroad fuel, so we had to stay on a commercial basis. The Pike County mine next to us had no commercial contract and continued on railroad fuel. That resulted in a difference in working time in favor of them and put us up against it pretty badly for cars. (1381) The first of August we went on to the Lake Erie & Western assigned cars at our Blackburn mine and that contract continued. We did not go out of the railroad business entirely at the Little mine, because we still had our railroad order which we attempted to fulfill in connection with our contract, but we did not have any assigned cars. In October our Little mine worked 85 hours; in November, 87½ hours; and our Blackburn mine, which had this fuel order, worked 131½ hours in October and 154 hours in November. The Pike County mine next to us operated 127½ hours in October and 149½ hours in November. As to the situation between November 10 and November 26, 1920, as a matter of fact (1382) after so many of the mines down there on the line went on full running time for the railroads it seemed impossible for the Big Four to put sufficient cars down there in that territory to run all the railroad mines and still give us much working time. The railroad had been a small line and during Federal administration had been operated by the C. & E. I. Railroad. About the close of that time, I think the beginning of 1920, this road was taken over by the Big Four. (1383) Of course, the Big Four increased the working time over what the receivership had been doing, and it seemed that the Big Four after October 1st placed more railroad tonnage on the line than could be accommodated by cars and engines. As a result of that the car distributor each day would place cars at the railroad mines first, and then if there was anything left for the mines who were on a commercial bases we got it. The railroad mines were output mines during this period. On November 10 we got cars. Then we had no more cars until Nov. 16, and they gave us three cars. At that time
we had an output of about 30 cars per day. I called up the
2072 superintendent's office down in Cincinnati and begged them for some relief, and the assistant general manager down there ordered them to run us on the 18th. On the 19th and 20th we were again idle, and I asked him for further relief. As a matter of fact, between November 10 and November 26 we had two days' operation. (1384) In October, 1920, our railroad rating was 1,395 tons per day, which was 21.3 per cent of our district. The total district loaded during that month 100,932 tons; 21.3 per cent, or what would have been our rating if the cars had been distributed equally, amounts to 21,498 tons. We actually loaded in the month 16,022 tons, which made a loss to us of 5,476 tons for October. In November our rating was 1,508 tons, which was 22.2 per cent of the district. The total district loaded in November 102,616 tons. Our percentage of that on an equal basis would have been 22,781 tons. We actually loaded 14,868 tons. We were short 7,813 tons. There was a change in the

wage rate about the month of August. As a result of the day men's strike we estimated the increased cost to us was about 25 cents per ton, spread over all our tonnage. (1385) As to hours worked and cost per ton in our two mines from April to December, 1920, omitting August in which month the change was made, in April we worked 88 hours and had a labor cost of $1.65 per ton. In May we worked 60 hours with a labor cost of $1.818. In June we worked 69½ hours, labor cost $1.788. In July we worked 100 hours and had a labor cost of $1.634. In September we worked 95 hours. We had a labor cost of $1.875. October 85 hours, labor cost $2.025; November 87½ hours, labor cost $1.874; December 80 hours, labor cost $1.795. Those are the figures from the Little's mine. (1386) The figures for the Blackburn mine are, April 83 hours work, $2.289 cost; May 74½ hours work, $2.221 cost; June 117 hours work, $2.057; July 104 hours, $2.098 cost. Eliminating August—September we were working on railroad fuel, 155 hours work, $2.087 cost; October 131½ hours, $2.075 cost; November 154 hours, $2.011 cost; December 136½ hours work, $1.956 cost.

2073 By Commissioner AITCHISON:

As to the inference to be drawn from those figures, the difference between an operation of between two and three days a week and four and five days a week in our property amounts to 25 to 30 cents per ton in labor cost alone.

By Mr. BALLARD:

In addition to that labor cost, we have a constant overhead, and the overhead per ton naturally fluctuates. (1387) As to the relative advantage to the coal operator as between operating with the assigned car in 1920 and operating to-day without it, a coal operator who attempts to build and maintain a regular legitimate coal business I should think would much prefer equal distribution of cars all the way around and an elimination of such factors as will greatly change the proportion of available equipment.

By Examiner BARTEL:

There are no preferential contracts on the Big Four in our district to-day to my knowledge.

By Mr. BALLARD:

There is no special clause in the contract, but I think all of us down there are inclined to give the railroads their tonnage, and I personally would be willing to sign a contract on that basis for the reason that our customers all realize (1388) that they can not be served unless the railroad has a sufficient amount of coal to operate their engines.

Cross-examination by Mr. FLETCHER:

I think there are some 13 or 14 mines in our district at the present time. (1389) It is my understanding that the Big Four is taking

out at the rate of about a million tons per year. That is about
2074 40 per cent of the four-day-per-week operation for the district.
The division will load about 130 cars per day. I have no idea what percentage of the coal consumed by the Big Four comes out of that district, other than it is general knowledge that the E. & I. division of the Big Four has always taken care of a pretty large proportion of the railroad fuel. From the 10th of November to the 26th of November the railroad fuel mines were not given all the cars they needed for railroad fuel. They were given the cars which were available, and during the period there were no cars available for commercial mines. (1390) We were limited to the cars the Big Four was receiving and could handle. As to whether the showing during those few days is a great deal disturbed by the fact that the Big Four took so much fuel coal into that district, I am giving it as an example of what can happen under the assigned-car rule. We operated 11 days during the month of October, but peculiar conditions at that time gave us only one day's work during the period from the 10th to the 26th (1391) and that was a result of the assigned-car practice on the E. & I. at that time. That was not a typical situation. It was very extreme. It is true that that grew out of the fact that only the cars were furnished in that district to get a very large supply of railroad-fuel coal at that time. I have no figures to show how that would have worked out if all the cars had been distributed equally. I assume that they got a proportion of cars as to other divisions, but I do not know. I do not think it preferable, if the railroads are going to assign cars at all, to assign them for just a few days in the week rather than for a six months' period. I think it preferable not to have assigned cars of any kind. (1392) I would not care to express an opinion as to how or what method you will establish for a practice which we consider unnecessary and unfair. I said that one of our reasons for favoring the abolition of assigned cars would be to give a large share to the coal operators,
which would have a stablizing influence. What I mean is
2075 that the operator who has been in business for a long time
and hopes to be in business for the future will likely welcome, to my mind, a portion of railroad tonnage, because it helps him to balance up. It is a constant tonnage. We have recently been through abnormal periods in which the production of coal has been disturbed, not by either the facilities for serving the mines or the ability of the mines to produce coal, but by some unfortunate circumstances (1393) which may or may not be general and, the chances are, are not general. I am talking about the coal business as for a period of years, not as to what I might be able to grab as a result of a strike of the miners. Every one of the mines in our district, to my knowledge, furnish fuel coal to the railroads. Nearly all is about the same quality. It is all what we term "No. 5" coal of the southern Indiana district. On our line I think possibly there are one or two small contracts for the Michigan Central, but the Big Four takes the major portion of the fuel coal.

By Commissioner AITCHISON:

I would favor similar treatment for foreign line coal. Assuming that we were going to have another mine opened up, there would be a scaling down. (1394) The new mine would be expected to take, whether it wanted to or not, a contract for some fuel coal. I think the mine owner should do that. I think it is his responsibility to help take care of the railroad. In addition to that there are times when the market is bad and it is to his added advantage to have part of that business. I doubt if you could compel this man to take his share of the contracts if he did not want to. I do not know how the operators are in other districts, but they aren't a bad bunch of fellows on our line down there. (1395) I would not suggest that a carrier should overcontract to get its fuel supply, but would suggest a contract containing a maximum and a minimum, and the total of the maximum to be above the current supplies. I think a railroad should, especially at times when they can safely
2076 anticipate trouble, store some coal to tide them through, just the same as any consumer of coal should safely do that. It is only good business to do it.

2077

2078 By Mr. FLETCHER:

(1396) During the period when we had the loss of labor our tonnage dropped. I did not find that we had enough men to take care of what coal we wanted to mine and had to mine. I would have been glad during the time the men left me to have more men. We had men enough to fill all the cars we had, but if I had been able to load double the number of cars per day then I would have received under the distribution of cars double the number of cars each day that I did receive. So in that way the shortage of labor hurt me. (1397) If my own mine during the period of car shortage should have loaded 4,000 instead of 2,000 tons per day, I would have received on such days as I did receive cars sufficient cars for 4,000 tons.

By Mr. BALLARD:

I always ran a full day if I ran at all. We are on a round robin system.

By Mr. FLETCHER:

In a general way I know where our miners who left us went. I know we lost men to the Pike County mines. As to the individual's names and the fact of their employment on a certain day, I do not know. Pike County mines were increasing their tonnage during that time, because their working time enabled them to draw men from the neighboring mines. (1398) The number of men they employed had a great deal to do with the amount of tonnage they could get out of their mines. Their tonnage was increasing all the time. They started loading about 1,900 tons a day and as they developed they increased the number of men. I do not know whether they had all the men they needed or not when they began.

By Mr. BRONSON:

2079 If the Big Four needed a million tons of fuel coal a year to come from our district my idea is that that amount ought to be divided up on contract with all the operators. As to obtaining its tonnage during the shortage, all I know is that during 1920 and 1921 and the present crisis they have secured the necessary tonnage without confiscation and without the use of assigned cars. This was not spot coal. They purchase practically no spot coal in our district. (1399) If we had a contract of that kind and our proportion was 20 or 30% of our total output, I would arrange to furnish that in the 50% period of car shortage by giving the railroad tonnage first. As to taking care of my other contracts, I would expect the railroad to give me sufficient cars to do it and my contractors also to the extent that if the situation was such as not to produce enough railroad fuel in the district they could only wait for their fuel because the railroad could not give them service in taking their own stuff and shipping their output unless they had coal. You could only assure yourself that a public utility would be satisfied by such an explanation by your experience as to what had been and what was likely to be the available car supply; and it is the operator's business to have some idea, whether it is correct or not, as to what the possible future business conditions will be. We would not take a chance of a suit for damages because you never contract to furnish an impossible amount of coal. (1400) In other words, you always protect yourself in that you are only selling the amount of coal that it is possible for you to produce. If I had a contract with a public utility and was not able to ship, it would be unfortunate for me and it would be unfortunate for that public utility, but he would still have the right to go on to the market and purchase from someone else. I would say that he could charge me the difference. They do not insist upon that.

2080 By Commissioner AITCHISON:

The point is that out West in our territory we are not compelled to sell on contracts which would subject us to damages in the case of the railroad being unable to furnish us equipment. We do not have to do that to secure business from our customers.

By Mr. FLETCHER:

It would be practicable for us to secure contracts with our commercial customers that contained a recital that we had made contracts with the railroads (1401) to give them a preferential supply of coal up to a certain number of cars per day. I would not want the business of a purchasing agent who did not understand that the railroad had to have its supply first. He would be a very narrow gauged purchasing agent if he would insist on our shipping coal to him ahead of railroad requirements. I have had no experience in attempting to negotiate contracts of that kind.

By Mr. CURRY:

From my own knowledge I have no information as to whether or not railroads use their assigned cars as a lever to get low prices on their coal.

Redirect examination by Mr. BALLARD:

I sell coal in substantial quantities to Kingan & Company, packers at Indianapolis. I have their contract amounting to 40 to 45 cars a week and have sold them coal for 18 years, and have had all their business for some five or six years. (1402) They understand the present arrangement for fueling the Big Four in our district and have no objection to it.

WILLIAM J. FREEMAN, called as a witness, and having been duly sworn, testified as follows:

2081 Direct examination by Mr. BALLARD:

I live at Terre Haute and am a coal operator. I am president and general manager of the Glen Ayr Coal Company, president and general manager of the Fayetteville Development Company, and secretary and general manager of the Green Valley Coal Company (1403) and have been connected with these companies various lengths of time from 20 years up until the most recent one, which was 1919, with the Glen Ayr Coal Company. I have a proprietary interest in these companies. The Glen Ayr Coal Company operates Glen Ayr mine No. 1 at Terre Haute on the Pennsylvania Railroad, and No. 2 on the Chicago, Milwaukee and St. Paul Railroad. The Fayetteville Development Company operates the Fayette mine on the Chicago, Milwaukee and St. Paul Railroad at Terre Haute, and the Green Valley Coal Company operates the Green Valley mine at Jasonville Ind., on the Chicago, Milwaukee and St. Paul Railroad. There are three mines on the Milwaukee, one on the Monon, and one on the Pennsylvania. (1404) Some of these have received assigned cars for railroad fuel. In the year 1920 our Glen Ayr mine went on a reduced running time on account of shortage of cars. Our output became very much reduced on account of losing men and it was attributable to mines on the same railroad in our near neighborhood receiving assigned cars for 100% running time. I think our running time ran as low as seven days a month. Then we took 100% for the contract in November, 1920. It was more than a day-by-day contract. I do not remember the term. (1405) That relieved our labor difficulties. I have never received assigned cars at any other mine. During the time that these other mines of ours have operated on commercial cars our neighbors received assigned cars for a short period of time. As to such competitors receiving
2082 assigned cars, there were certain mines on the St. Paul, what is known as the Wyckoff mine and the Miami Coal Company, some four or five mines. There was a mine on the Pennsyl-

vania near our Glen Ayr mine which received assigned cars in 1920, the Glendale mine. (1406) They had an output contract. During these periods when our mines have been on commercial cars and our neighbors on assigned cars, our labor force became depleted. We have prepared a statistical exhibit showing various aspects of our situation at the Glen Ayr throughout 1920.

(The statement referred to was offered and received in evidence as Exhibit No. 55.)

Referring to this statement in the month of January this mine worked 16 days and had an average working force of 233 men and loaded 21,100 tons. (1407) The mine by the 30th of May having worked 18 days in March had the running time reduced to seven days for the month. Our labor force had dwindled from 233 in the month of January to 196 in May. The short running time produced a reduction in labor force and like wise in production. That same is true throughout the year, except that in the month of June we had 139 hours and lost time on account of mine disability, but we figured that that did not hurt us any in running time because the car supply for the pervious month was that low and for the next month was that low, and although we had a cave-in we did not figure that it hurt us any. (1408) Our cost was $2.02 per ton in the month of January on 16 days' running time, in May, $2.70 on eight days' running time, and in the month of June on seven days' running time it was $3.26.

There was a change in the wage scale in the month of August,
2083 I think it was. This table is figured on an adjusted basis, taking the same wage scale all the way through and applying it, giving an exact comparison. In other words, this cost per ton after the increase is not on the actual wages paid, but is figured the same as if there had been no increase granted, so that the comparison is right. My information is that the competing mines which had output contracts in 1920 sold only priority coal to the railroad and disposed of the slack commercially. That occurred at the Glendale mine of the Glendale Coal Company on the Pennsylvania Railroad, probably during late spring or early summer of the year. (1409) I do not know whether the cars they used to dispose of their slack were assigned cars or commercial cars. The only information I have is that the mine ran full and shipped both prepared sizes and commercial slack. As to how we were running at that time, we started out with 16, 14 and 18—that is, January, February and March—days per month, and got down to 8, 7 and 7 in April, May and June. In addition to what appears on my exhibit, our experience has been, and was at that time, that our miners were very much dissatisfied and could not understand why a mine next to them was run full while we were running seven and eight days per month, and they thought we were at fault, that we did not run our business as we should and were very much dissatisfied. We not only have lost labor, but what we kept has been dissatisfied. (1410) We had several strikes and some trivial things which would not have occurred if the men had been in a satisfied frame of mind. I can not see

that the difficulties I have named would be remedied by assigning cars under six months' output contracts. I think these difficulties would be eliminated by an equal pro rata distribution. I think that a carrier would be able to procure its fuel supply without assigned cars. The Pennsylvania is now getting its fuel on the St.
2084 Louis division on current orders and are not using assigned cars. I think almost all the mines participate in the orders. We participate. (1411) I could not say what percentage of our output is covered from month to month by these orders. I know we would like to have some more of the business right now. I would be willing to accept from the Pennsylvania a good-sized order—25 or 30 per cent. I could hardly say what the attitude of the other operators is in that respect. They always have participated in the supply of railroad requirements and are now participating. I do not know at what rate per year the Pennsylvania Railroad is taking fuel out of that district now. Our car supply there is three or four cars per week. It has been five at one time recently. (1412) Along in the years 1910, 1911, 1912, and 1913 the Pennsylvania secured fuel from our district without the use of assigned cars. Along there they always bought their fuel on the basis of buying a proportionate amount from each operator proportionate to their commercial tonnage. Contracts were spread pretty generally to all operators. They got their coal in that manner and did not assign cars. I think the St. Paul is buying on contracts. We do not participate in any of its business because our coal is No. 4 coal and as a general proposition does not go to the railroads. It goes more to the domestic and the higher grade coal users. I can not say that under contracts which I had with the Pennsylvania in the earlier years I spoke of, that it was understood that their coal would be furnished first every day, any more than that, for our part, we never accept obligations upon more contracts than we feel we can probably fill under the worst car shortage. (1413) I never heard of any controversy on that score.

By Commissioner AITCHISON:

If there came a time when the cars were only in sufficient
2085 amounts to fill railroad needs and they told us they would be up against it and they must have coal, the first coal, I presume, we would give it to them, although I have never been up against a proposition of that kind.

By Mr. BROWN:

The contracts we have with the Pennsylvania are only by correspondence. They are buying on current orders. Of course, the orders are usually in writing, but not always. (1414) Sometimes they are telephoned.

Cross-examination by Mr. BRONSON:

I could not say what price they pay at this time. We are not getting as much for the railroad coal as if we put the same coal on

the market. The correspondence does not specify a particular price for a particular period. It is a spot price.

By Mr. BALLARD:

I have not a long-term contract at this time with the Pennsylvania or other carriers, but did have long-term contracts prior to 1915.

By Mr. FLETCHER:

(1416) The percentage of time lost, 19% in July and 27% in August, was due to the demand of some of our men for increased wages. That was the general condition all over the State that time, what we call the strike of the day men. I haven't the date of the switchmen's strike in mind.

By Mr. BRONSON:

(1418) We worked seven days in June. So that the working days were reduced to seven very much more by mine conditions than by car shortage. We had both causes. But I do not think the number of days worked would have been increased any if we had not had any mine disability.

2086 By Commissioner AITCHISON:

These are monthly totals. On the days when we had mine disability we did not order cars but they were charged against us by the railroad the same as if we had ordered.

By Mr. CURRY:

The figures on Exhibit 55 under the heading "Hours actually worked" are from tipple records and are the same figures reported to the railroad. (1419) The rating of the Glen Ayr Coal Company mine is about 1,400 tons a day. (1420) We are under no contract at the present time for any per cent of this coal to the Pennsylvania Railroad. We are shipping them, some on current orders, and I would say it will run three or four cars a day.

By Commissioner AITCHISON:

That is about 10% of our capacity and more than our output because we are only probably averaging about four days a week. We have no foreign railroad-fuel orders.

By Mr. CURRY:

(1421) I would not say any railroad has "bargained" with me for a price on coal by using the assigned car as an inducement, but I will say that all the coal we have ever sold on assigned cars has been at less than what we could have gotten for the coal on the market. Any operator would naturally be willing to sell coal cheaper under those circumstances.

By Commissioner AITCHISON:

I said that we were selling to the railroad cheaper than we could sell commercially on the market. I think our railroad price is a little less than we could get on the market for commercial coal.

(1422) We want to give the railroads consideration at all times. There was not any inducement made to get us to do that.

2087 S. R. JENNINGS, called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. BALLARD:

I am a coal operator living at Johnson City and am connected with a number of coal operating companies. The Hazzard Blue Grass Coal Corporation is the principal operation I am connected with on the Louisville and Nashville. (1424) I am president of that corporation. It operates mines No. 1 and No. 2 at Hazzard, Ky., in the Hazzard district. We have never had assigned cars at those mines. There are quite a number of mines in the neighborhood which either do receive or have received assigned cars. The mine adjoining, the Ashless Coal Company, has. There are quite a number of them. I think one is the Elkhorn Junior. The Knott Mining Company is one. These mines I speak of are output mines. (1425) The mine adjoining ours, the Ashless Coal Company, has furnished fuel coal on assigned cars for a number of years and that has been on yearly contracts. There are no mines in our neighborhood which have received assigned cars on alternate days to my knowledge. The Ashless mine is getting to-day almost 100% running time per week. Last month we worked about a day to a day and a half. This month we have been working from a day and a half to two days per week. It has increased our cost more than $1.00 per ton above what it would have cost us had we been able to run 100% or as much as our next-door neighbor. (1426) It has had a dissatisfying effect on our labor. Your best men want to go where they can get more regular employment. It disorganizes and dissatisfies them. I know as an actual fact that we have lost men to the Ashless mine. I could not say to what extent, but I would say almost all of them who could get employment. The condition of the morale of the labor which remains with us is bad, because of poor running
2088 time. It is affected by the fact that a neighboring mine has full running time. The loss of labor affects the development and extension of our mine. If I were running full time or had a much better car supply I could carry on my development and properly develop our properties to the production of bigger tonnage.

By Commissioner AITCHISON:

(1427) As to whether a further development of mines is what is needed down there, I think the mines which have been opened and have made large expenditures ought to be allowed to fully develop their properties. As to whether we could all operate if we had 100% of the time, I think those that are producing a high-grade coal at a reasonable cost could dispose of 100% production. I think that if all were working 100% the mine producing poor coal at a high cost would be weeded out of the business. Then I do not believe there would be an over production.

My Mr. BALLARD:

If all the cars in our district had been distributed pro rata during recent weeks it would have materially increased our production. (1428) The Louisville and Nashville Railroad has approximately 1,000 cars a month in the neighborhood, assigned cars. They have been furnishing for commercial purposes between 8,000 and 9,000 cars a month. It would have been increased about 1,000 cars per month or approximately 10 to 12½%; that is, the increase in each commercial mine's share. In my opinion it would be beneficial to the coal industry if all cars should be equally distributed.

Cross-examination by Mr. FLETCHER:

If our car supply were increased by 10% from equal distribution of all cars, it would increase my running time just about one-tenth.

2089 NOVEMBER 22, 1922.

RALPH COURTNEY, called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. BALLARD:

I am assistant general manager, Robinson coal interests, Fairmont, W. Va. (1432) These interests include quite a number of mines—Clauson, Helen, Barry, Davis, Wise, James, Robert, and Delmar Nos. 1, 2, 3, and 4, on the Baltimore & Ohio. As assistant general manager of these interests I am familiar with all departments of the business and the situation respecting car supply and distribution. There has been a decided shortage on the Monongah division of the B. & O. since the strike. We are led to believe that the B. & O. is at this time assigning fuel cars on that division. We are so told by the car distributor of the Monongah division. (1433) The average loading of assigned cars will vary from 390 to 415 cars per day. The mines receiving these cars are operating substantially full time. There are no mines in our district to-day receiving assigned cars on some days and commercial cars on other days. That is not the B. & O. practice. There is a railroad rule in effect which prevents that. In order for a mine operator to obtain an assigned car contract he must contract with some railroad for the output or partial output of his mine for a period of at least six months. During that time he can not load any commercial cars, even though he contracts part of the output. The percentage of our car supply in our district, on the Monongah division, from Oct. 1 to Oct. 11, was 34.5 per cent. (1434) The percentage of cars received by our mines on that division was 24 per cent. None of our mines received assigned cars. The nearest mines to ours which are receiving cars are Galloway Nos. 2 and 3, operated by the Simpson Creek Coal Company. Those mines are located near our Barry, Davis, and Delmar Nos. 1, 2, 3, and 4. They are all in a group and
2090 located in the Flemington region. The two Simpson mines are in the same region. I have prepared a statement showing

the cars received and the percentage of car supply to our eleven mines during this period.

(The statement referred to was offered and received in evidence as Exhibit No. 56.) (1435)

This exhibit represents the car supply of each of these mines in the aggregate for this period. I have also an exhibit showing the car supply to the two mines of the Simpson Creek Coal Company during this period.

By Examiner BARTEL:

As to how the number of cars placed compare with the orders as distinguished from ratings shown on Exhibit No. 56, I will say that we order our rating every day.

By Commissioner AITCHISON: (1436)

We always have orders when we order our rating. If we got our rating three hundred and some days in the year, we could load a little better than our rating. As to what other mines can do, I refer only to our own mines. It all comes down to a matter of salesmanship. A man who sells his coal works if he gets the cars. A man who cannot sell his coal cannot work.

(The statement referred to as to the two mines of the Simpson Creek Coal Company was offered and received in evidence as Exhibit No. 57.) (1437)

Our rating increased ten cars for the total number of mines on the 11th of the month on account of development. We have two mines that would rapidly develop if we could get the cars. (1438) The daily rating of all these mines was 101, and increased to 111. I could not explain why the rating of the Galloway mines increased, as shown in Exhibit 57. I do not know a thing about their operations.

2091 By Mr. BALLARD:

I have also prepared an exhibit showing the cars loaded, the total rating, the per cent of supply and the cars left over, for the Monongah division for the same period.

(The statement referred to was offered and received in evidence as Exhibit No. 58.) (1439)

By Mr. BALLARD:

My Exhibit No. 58 shows the percentage of supply on the division which I testified to of 34½ per cent. As to the effect of that on our labor situation, we, as all mines which have been loading only commercial cars, have suffered in that we have lost a certain number of men from practically all of our operations. These men try to better their working conditions by going to mines that they know have assigned cars, or at least are running steady at the present time. As to the labor remaining with us they are naturally very dissatisfied. As to the effect on cost, a lower production always tends to increase your production cost. (1440) As to the commercial end of our business we lose certain customers that we are not able to take care of on

account of not being able to furnish delivery. We had, as one instance, two orders cancelled Saturday before I came down here on account of delayed delivery, the reason for delay being short car supply.

Cross-examination by Mr. FLETCHER:

We lost just the number of cars that were cancelled that we could have filled if we had had the cars. I stated that we always loaded to the full rating if we could get the cars throughout the year, but it happened that these orders which were cancelled were a little above the market. (1441) I think that at the present time there is a
2092 surplus of mine labor on our division. We could supply the places of the miners we lose to these output mines, but we would have to take them from someone else. The worst effect is on the "floater." They begin to float around hunting a place
2093 where they can better their working conditions. (1442) I attribute the car shortage on our division to the practice of assigning cars only to the extent that we know we are suffering from that cause. I do not know what proportion of the 25,572 cars produced on that division as shown by my Exhibit No. 58 is taken by the B. & O. for fuel. I have no definite figures as to how much of the fuel of the B. & O. is supplied from that division, but it is generally understood that the major portion of its fuel comes from the Monongah division.

By Mr. CURRY:

The solution I would suggest by which the railroads would be able to secure an adequate supply of fuel at a reasonable price without the use of assigned cars is by offering each operator on the line a certain amount of their fuel orders over the year. (1443) From my experience, I think, the operators always have been willing to do that. The assigned-car rule has been in use out on our division until it was knocked out by the ruling, and then went back in after the strike. I don't think it was in use during the peak shortage of cars in 1920, but I do not remember. If there was a fair and equal distribution of all available cars coming on to the Monongah division, we would be willing to give the railroad the first cars delivered up to a given amount. We would not guarantee a third of our rating because we have not been receiving one-fifth of our rating. Referring to my Exhibit No. 58, the percentage there is the percentage of cars loaded to the rating. (1445) I have no figures showing what the percentage of cars placed to the rating would be, but you could arrive at that by adding the cars left over each day, shown in the fourth column, to the cars loaded. I do not know what the commercial percentage in our district was as compared with the percentage for the whole field during that period, but I presume our mines received their just share of the commercial cars.

2094 Redirect examination by Mr. BALLARD:

If all cars had been pro-rated on our division we would have received 34.5 per cent of our rating (1446) and in fact received about

25 per cent. The difference between those two is the measure of our loss. I thought I made it plain that as to my willingness to commit myself to a particular percentage of my rating I assumed that the other operators would be in the same situation when I said that the railroads should offer their tonnage to each operator on the line.

By Commissioner AITCHISON:

Each operator would not be compelled to accept the offer. If he does not, I would say that other operators would be glad to take the tonnage. Having made the offer to all the operators the railroad should not be permitted to assign sufficient cars to the operators who were willing to see that it had a fuel supply. (1447)

Recross-examination by Mr. FLETCHER:

If only three operators agreed to furnish any coal to the railroads and the others declined, my answer would be the same. We are not in favor of assigned cars.

By Commissioner AITCHISON:

If all except one should agree, that still would not make it right. One operator would have it in his power to block any arrangement of that sort, except that that would be rather far-fetched out of 250 operators on the Monongah division. As to the possibility of the B. & O. making fuel contracts with 250 operators, they could at least offer the contracts. They all provide the kind of coal the railroads need when they need it bad enough. I did not hear the testimony of Mr. Galloway with respect to the effect on their operations
2095 of their having received numerous grades of coal from this division during the period that the cars were not assigned. (1448) If he testified that it had a very bad effect on their ability to operate their properties, I do not care to comment upon that or to deny it, because I realize as everyone else that there are several grades of coal loaded on the Monongah division. I could not say whether all of them are the kind of coal the B. & O. ought to have. All I know is that they have taken all grades of coal. They have followed the practice of confiscating coal in the past.

WALTER D. MCKINNEY, called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. BROWN:

I am secretary of the Southern Ohio Coal Exchange, an organization of operators located in the State of Ohio. It is a voluntary organization consisting of about 75 members controlling about 150 mines. (1451) As secretary I look after the general affairs that the operators have in common with each other except selling. I have nothing to do with selling. I have a general knowledge of their operation, transportation, and other conditions. I have held that position about six years, and prior to that time I had some transportation experience. I was an industrial engineer, and prior to that with the C., H. & S. R. R. for some 15 years. To develop the consequences and the evils

growing out of the assigned-car practice is the purpose of such testimony and exhibits supporting the same as I may offer. (1452) Much misunderstanding has grown out of different interpretations of the meaning of "an assigned car." As to the use of an assigned car as such there can, in my judgment, be no logical objection. To
2096 assign certain kinds of equipment to certain uses or to confine equipment to certain destinations is in many cases necessary to obtain maximum service for the carriers, shippers, and the public. It is the use of assigned cars to produce an unequal distribution of cars among mines, with its consequent unequal work time and costs among mines, that in my judgment constitutes the evil of the assigned-car practice in the coal industry. To illustrate this, I offer an exhibit which consists, first, of a chart showing in graphic form the percentage of car supply for 1920 of the Toledo & Ohio Central Railroad, Corning district, and Zanesville & Western, Fultonham district. (1453) Those districts are under my jurisdiction as secretary. Supporting this exhibit and a part thereof is shown the detail, by months and tons, from which the graphic chart was made. This exhibit was prepared under my direction. Part of it is a table in short form showing the effect of short working time on cost. This in complete detail has been produced in this case in Exhibits 38 and 39, introduced by W. B. Reed. Also as a part of this exhibit is found a formula by which the average cost of coal under the different percentages of car supply as shown on the graphic chart has been ascertained. This exhibit followed through will show that in the application of the formula, the average costs of the mines in the Corning district for 1920 are as follows: Mines working on assigned cars, $3.03 per ton; mines working on non-assigned cars, $391 per ton; had mines worked on equal time, $3.59. The average costs for mines in the Fultonham district were: Mines working on assigned cars, $2.99 per ton; mines working on non-assigned cars, $3.91 per ton; had mines worked on equal time the cost would have been $3.72 per ton.

(This exhibit was offered and received in evidence as Exhibit No. 59.)

I now offer another exhibit. This is a summary of cars ordered and placed on the Toledo & Ohio Central Railroad
2097 for six weeks ending November 11, 1922. The object of this exhibit is to show that the average (1455) car supply furnished mines by that railroad was 35 per cent for the entire period, and that had the railroad fuel been eliminated the supply of cars for commercial mines would have been 29 per cent, and that the costs based on the formulæ of my last exhibit would have been: For mines loading assigned cars, $2.94 per ton; mines loading commercial cars, $5.14 per ton; had mines been working equal time, $4.92 per ton. This exhibit was prepared by me.

(The exhibit referred to was offered and received in evidence as Exhibit No. 60.)

By Commissioner AITCHISON:

The costs I show are worked out on the formula I used. (1456) I do not know what the actual costs were and they have not been compiled for these companies. The only thorough compilation which has been made was made by the Federal Trade Commission in 1918. That is the only reliable compilation of costs that I know of.

By Mr. FLETCHER:

The formula that I have worked out is based on conditions in mines in our own district. I was using the formula introduced by Mr. Reed. He stated that the formula was worked out by the United States fuel engineers on an experience with certain mines in West Virginia, the New River district (1457) but those formulæ have been checked up and verified by comparison with various districts in the United States, and in my judgment they are correct, speaking from my experience in my own district.

By Commissioner AITCHISON:

Referring to the curve in his exhibit. the difference between the cost when you get down to the wer percentage is almost
2098 infinitely great. We will say the cost is $3.00 per ton. There is at least an average of 75 cents per ton of that which is what we might call the irreducible minimum. That not only exists in mining but in railroading and other pursuits. (1458) It is quite possible to find from this chart that the cost of a 5 per cent car supply is greater for the amount of coal in the aggregate than with a hundred per cent. As to how that can be, there is that element of cost which remains in every operation when you are prepared to produce and are not working, as, for instance, in a mine keeping the pumps going, keeping air in the shaft, keeping the engines going and everything necessary on the property while it is lying idle and ready to produce. (1459) The curve goes to infinity. If the mine produced only one ton, that one ton would be their entire cost of operating the mine and keeping it ready to operate. I could not state that this curve shows that to produce one ton would cost more than the total bond issue of the United States. (1460) As to whether it is a parabolic curve which never hits its axis, I have not pursued it that far. I think this curve would probably show that it would cost more money than is to produce one ton. Those curves I believe to be correct up to that point.

By Mr. FLETCHER:

As to where the curve ceases to be right and begins to be absurdly wrong, I have not pursued it that far. (1461) As to the effect of part working time on the capital investment, it is easily understood that if an investment of $300,000 would be required to properly capitalize a mine to produce 100,000 tons of coal annually (1462) the investment would be $3.00 per ton of production, but if the mine produced but 30,000 tons or 30 per cent, the investment would

equal $10 per ton. These inequalities and the adjustment thereo must be borne by the public through increased prices or the operato will be eliminated.

2099 By Commissioner AITCHISON:

The normal amount of coal produced in this country is obtained upon a normal car supply, which if prorated throughout the year would be roughly two-thirds of the rating. All of the coal that is needed in this country, even at peak, could not be produced with a two-thirds car supply throughout the year. Those formulæ I have used are based on actual experience of full working time when the mines were working full. (1463) My tables have been practically compiled from percentages of cars furnished to mine rating. They are based on the cars ordered. They ordered their rating practically in every case of this kind. So it would be fair to assume that it is according to the rating of the mines which ordered cars. Possibly it would be better to work this up on basis of the normal demand rather than the peak demand, but the relationship would be the same as between the mine working on an average normal output in comparison to the abnormality that is produced by the assigned car as between the mines.

By Mr. BROWN:

I have assumed that the assigned-car mine works one hundred per cent of rating. I have used the assigned car as the base. (1464)

By Commissioner AITCHISON:

At certain times of the year when the mines would be subjected to the close and keen competition that they would be if they were all furnished with ample cars, the inefficient mines would be closed down and boarded up and it would leave the efficient mines working not only on a cost but on a selling price that would be at the bottom. These capital charges would be running until those mines were eliminated, and the only solution of the proposition is ample transportation facilities (1465) that will serve the efficient mine and eliminate the inefficient mine.

2100 Cross-examination by Mr. FLETCHER (1467):

As to Lake coal on the exhibit, I treated that as commercial coal. It did not move in assigned cars except a certain period. There was a week or two there when they tried to move some, but it only amounted to three or four days. That was under a priority order from the commission. I used a formula made up on conditions which prevailed in the New River district of West Virginia, supplemented by the other part of Mr. Reed's exhibit as to which the fuel engineer stated on page 21 of their engineering report, that while they had used that chart taken from those particular mines, they had checked that up with operations all over this country. I only used that chart after it had coincided with my judgment through the several years of my experience in that field. It is my judgment that (1469) inde-

pendent of charts and formulæ and falling back just on experience, the cost of producing a ton of coal goes from $2.94 to $5.14 under an actual car supply of 20 per cent.

By Mr. CURRY (1472):

The railroads which serve the operations that are in my association are the Toledo & Ohio Central, Zanesville & Western, and Kanawha & Michigan of the New York Central lines; Hocking Valley; Baltimore & Ohio, three divisions; and Pennsylvania Railroad in the Crooksville district. None of those railroads serving that district secure their coal without the use of assigned cars, that I know of.

By Mr. BALLARD:

That is [true] in that district except at times.

By Mr. CURRY:

As to whether railroads could secure an adequate suitable and regular supply of coal at a fair price without the use of the
2101 assigned-car rule, inasmuch as in itmes of car shortage it is transportation they are buying, I could not be sure what they might regard as a reasonable price. It is transportation that makes the price. We are selling transportation, coal on cars and not at the mines. If they would buy it on the open market, they would pay the same price the public would pay. As to whether during a period of car shortage they ought to pay the prevailing high spot prices, that is the only way that they will correct the evil for which they are responsible. (1473)

By Mr. FLETCHER:

The evil is having a car supply such as we have shown here, that is not sufficient to take care of the requirements of the public generally, whatever that may be at that particular time. I do not think the country ought to stand for a program which would require the railroads to furnish themselves with cars, engines, yards, tracks, and facilities generally which would allow the coal mines to shut down from strike or other conditions practically half the time and then supply the needs of the country in six months so as to make a tremendous peak of production. But I believe that the railroads should do for the public what they want to do for themselves, namely, throw in cars sufficient for the coal industry, because the public needs the coal just the same as the railroads and along and currently with them.

By Mr. CURRY (1474):

The solution I have for eliminating the evils of the assigned car rule is that instead of furnishing the coal industry the residue of the equipment they get the primary first use of it for handling coal until the public is served.

By Commissioner AITCHISON:

We should have the choice of equipment on such equipment
2102 as has been purchased primarily for the handling of coal. I mean a railroad, for instance, like the Hocking Valley. The Hocking Valley has purchased coal cars for the purpose of hauling coal primarily (1475) and through which coal industries have developed. These cars leave the Hocking Valley Railroad loaded with coal, and as we know in the past they have been loaded by the railroads who do not own sufficient open top equipment, with other commodities, from automobiles down, and not gone back promptly into the coal trade. I am opposed to the issuance of any sort of regulation, either by the commission, the carrier, or anyone else, which picks out one form of industry and gives it the first draft of cars. I would say that as a general proposition we should avoid all forms of interference other than those things which are natural. But I do believe that the cars which have been purchased by the coal producing road for the primary purpose of hauling coal should when unloaded be returned, under the American Railway Association's rules, back to the mines promptly.

2103 (1477) As to the feasibility of preferential contracts to enable a carrier to get its fuel, I don't know that I would approve or suggest any prior or preferential contract by which one person secures his coal, except possibly the date on which it is purchased. The operator takes a contract to supply coal to a public utility, we will say, or to a householder, or what not, and he takes an order to do that and I think that order would have preference and priority over a contract which he took tomorrow. As to avoiding the necessity of over-contracting for coal, you are touching the human phase of it, like the domestic dealer that wants one car of coal and he is very apt to order three, one from each of three persons. (1478) Railroads are very apt to do the same thing by over-ordering their requirements. I would say that the logical and proper thing for them to do would be to have their contract provide for a maximum and minimum. That has been done in our territory at different times at different places. That would be the solution. The public utilities order that way, the maximum and the minimum, in our district. Columbus Railway and Light Company would be one. I think that you would find that that would be their practice except that they are one of the extraordinarily prudent that always buy on low market. They do not use assigned cars.

By Mr. FLETCHER:

The public utilities operating in the way I have described buy their coal ordinarily when coal is cheap in large quantities and store it. They have at times six or eight months' supply of coal on hand. They went all through the coal strike and had a couple of months left.

By Mr. CURRY:

(1479) I could not say as to whether a railroad should store six months' supply of coal but they should store an ample supply of coal at all times that would carry them over a long period, six months.

2104 By Commissioner AITCHISON:

A surplus of storage of coal for a year and a half would be unreasonable. That is an extraordinary emergency. I can see no way than simply for the carriers to buy their coal the same as anyone else. They could always buy their coal to meet the situation of a prolonged car shortage. As to whether I would throw them into the open market to compete with others on the basis of who has the lowest price (1480), I would, inasmuch as the condition arising out of transportation disability over which they are primarily responsible, though not altogether responsible at times, is under their jurisdiction to correct largely. I would have no objection (1481) to a railroad owning a mine, but would object to its using equipment for that mine in excess of the other mines, even if that equipment were procured for that specific purpose and for no other purpose. The Hocking Valley, for instance, has taken over so many cars out of their cars and marked them "X series" and are using those cars entirely in their trade, although they do not own the mines. As to whether I would object even if the equipment were especially designed for this purpose and were unsuitable for commercial purposes, it is the effect. I would object to anyone that would make an unequal distribution of working time between mines or industries working in competition with each other. It all simmers down to that one question.

By Mr. FLETCHER:

(1482) There is no way I can see that we could object to an arrangement whereby a railroad might own a mine which had to run all the time to produce coal that was not transported in cars but loaded from the tipple into engines, for the simple reason that they are not using the equipment that goes into the commercial trade. I appreciate it would have the same demoralizing effect upon labor
2105 that has been spoken of. It is one of the rare exceptions that almost always apply to almost any rule. It is infinitesimal.

2106 (1482) By Mr. CURRY:

As to whether I would object to the railroads using their equipment to move coal from stock piles to points of consumption, that equipment does not enter into the distribution of cars among mines.

By Commissioner AITCHISON:

That would probably be classed the same as hauling sand or gravel or stone or almost anything else; it would be away from the mine.

(1483) It would be unfortunate for a railroad to store coal in such

a way and at such points, it seems to me, that it would have to be again loaded and transported in cars except to the lowest possible requirement. My objection as to carriers which originate no coal whatever and have bought cars designed to transport coal with the intention of using them only for getting coal for themselves, resolves itself primarily down to the unequal working time of the district [that might not be so objectionable], were it not for the fact that we have so many cases that are continually coming up in which the railroads that do not produce the coal use their cars, especially if they are assigned cars, while they hold the cars of other lines to perform the service on their own lines that those cars should do. I refer, for instance, to the Pere Marquette, if that was one of the lines that would put its cars in the service, assigning them for hauling railroad fuel, while they would hold the Hocking Valley and T. & O. C. cars on their lines to perform the service for which those other cars should be used. (1484) My objection has turned primarily on the unequal mine labor which results.

By Mr. CURRY:

Part of my objection to the assigned car rule is that it is used by the railroads as a method of bargaining for the price and trading cars for the price to be paid. They use the cars to buy the
2107 coal so as to get better transportation. They offer better transportation facilities than they offer to the commercial trade. I could not answer offhand as to any instances of that from my own knowledge. (1485)

By Commissioner AITCHISON:

In 1917, to be specific, the B. & O. had a contract with certain operators on its line, a few of them, for fuel coal at $1.40 a ton. At that time they would give that coal to anyone that would load it for $1.40 a ton and would fill their mines full running time. The purchasing agent approached certain operators on the line and offered them full running time on coal at $1.40. At that time the cost had mounted so that the cost on that coal was over $2.00. One of our operators then wired the superintendent of the B. & O. asking for more cars. He said they were getting all the cars they were entitled to. I think they were running about 20 to 25 or 30 per cent. I pealed to Mr. Peabody at that time, who was then representing the fuel end of the railroad, working in connection with the railroad board. We came down to Washington and went before the Railroad War Board and recited the whole circumstances to them, where on the fuel coal they could get all the cars they wanted at $1.40, but on commmercial coal they could get from 20 to 25 per cent of the running time. (1486) Mr. Willard himself was there, as the records will disclose, and he asked if we had been to Baltimore and asked if we would go to Baltimore. I told him, no, in the light of these two things: A telegram from the superintendent that we could get from 20 to 30 per cent car supply for commercial coal and a statement

from the purchasing agent to the effect that we could get full time on railroad fuel at $1.40. Our operators went to Baltimore and the matter was promptly corrected. I do not recollect anything just like that later than 1917. As to whether my testimony with respect to carriers buying transportation applies to 1917 or to present time, I have no reason to believe that human nature has changed since that time. I do know that they are, or have been, offering certain
2108 prices for their coal. (1487) This is absolutely hearsay because I have nothing to do with the selling of coal. This is what I get from the operators, that the T. & O. C. R. R. have been offering a certain price for coal on 100 per cent car supply. If they do not furnish it at that price they get no assigned cars. That seems to be the general thing. I would not want to put that to any specific person that I can recall at this time.

By Mr. FLETCHER:

It is a matter, possibly, of gossip, more than facts which I can testify to. The T. & O. C. is one of the roads.

ROBERT MARSHALL, called as a witness, and being first duly sworn, testified as follows:

Direct examination by Mr. Brown (1488):

I am president of sub district No. 1, of district 6, of the United Mine Workers of Ohio, a branch of the United Mine Workers of America. (1489) I have held the position of president for about eighteen months, and prior thereto for three and a half years was vice president. My jurisdiction extends over half of Hocking and part of Prairie Counties, in southeastern Ohio. Approximately 250 mines are located in that territory. There are in my district, as members of my union, between 10 and 12,000 mines, and about 11,000 at the present time. When I said 10 or 12,000 is means that there is a going and coming back and forth as work is provided for them. There are mines in my district which furnish railway fuel through assigned cars (1490) and mines which do not. On the assigned car to the mines in my district they work almost full time while the mines on commercial time work from six hours to perhaps a day and a half and two days per week. My understanding is that the contracts pro-
2109 vide for the entire output of the mine to which the cars are assigned. As to the effect of this situation on the morale of the members of my organization, it makes the men in my district very dissatisfied relative to the working of the mines loading fuel coal and the mines that are loading commercial coal. Even the men who work at the mines loading fuel coal are not satisfied, even themselves (1491) to work every day and the other mines remain idle. I have known of men at the mines that were working on fuel coal to even invite those who were idle to come over with them, making an overcrowded condition and lessening the earning capacity of the men employed at the fuel mines.

By Commissioner AITCHISON:

As I understand the question of the miner from a practical standpoint, it is this: They may be loading fuel now, and after the fuel order, the other fellow might get it later, and they are dissatisfied because they are working now and perhaps in a few months they are idle, just like the other fellow is now while they are loading fuel coal.

By Mr. BROWN:

The character of the coal produced in the mines of our district is, with reference to its suitability for railroad fuel use, to a large extent uniform (1492); that is, all of the mines that we would call the legitimate mines; I am not speaking now of wagon mines. My experience as a practical miner and as an officer of the organization would be that the miner will not produce more coal per hour per day on short time. The miner is not as efficient when he is lying idle and working a day a week as the miner who is working five or six days a week. It has not been my experience that miners as a rule will work, say, three or four days a week, and then loaf the other days from preference. As I understand the miner, he likes to see his envelop swell just as well as any other laboring man.

2110 By Commissioner AITCHISON (1493):

If a miner is loading coal on the tipple and he knows the faster he works the bigger is going to be his mine rating and the better his chance of getting more cars, he naturally would speed up pretty much. He is working there on the tipple, and he handles the cars just as fast as they get the cars to him. It is human nature for them to see what they can do in getting that coal loaded in the fastest time possible and if necessary to put in extra efforts. They do that. A mine may load, for example, today 2,000 tons. The same number of men with the same number of day labor will load 2,200 or 2,300 the next day. And they will do that if neccessary in order to help their car supply. (1494)

By Mr. BROWN:

The men at mines working one day a week or half a day a week do not feel like going the day the mine is open for work, even for four or six hours, when they are only working that time per week. If there were a ratable distribution of cars among all the mines in my district the effect "would be a larger feeling of making amongst the mine workers a better citizenship," in giving them an equal chance of getting an equal number of days' work. It would decrease the hours of the assigned car mines and increase the number of hours in the commercial mines.

Cross-examination by Mr. FLETCHER (1495):

At this time there is a surplus, I would say, of mine labor in my jurisdiction. In our district, with 11,000 men, there would be at this time, I should judge, almost 2,000 more than are necessary.

By Mr. CURRY:

The railroads serving that district are the T. & O. C., the
2111 K. & M., the Z. & W., the B. & O., and the Hocking Valley. I do not know of any of those railroads which operate without the use of the assigned car rule. (1496) As I understand, the car supply in my district is based on the tonnage from the mines for commercial mines on turn, as the capacity of the mine is loaded. The loaders and machine men only work when the mine is working, meaning that the mine is loading and dumping coal.

WALTER A. JONES (1502), called as a witness, and being first duly sworn, testified as follows:

I am statistician for the Central Pennsylvania Coal Producers' Association, at Altoona, and have held that job about four and a half years. Just prior to that I was with the Federal Trade Commission on coal cost accounting, for about one year, and prior to that I was valuation engineer for the Lehigh Valley Coal Company. Immediately preceding I was valuation engineer for various railroads throughout the country. I am a graduate engineer of Yale, Sheffield Scientific School. The purpose of the Central Pennsylvania Coal Producers' Association is to disseminate information concerning production and general data that would be of interest and help to the members, including data as to car supply. (1504). I am authorized to speak for the association. The association is a voluntary organization of 204 coal operators who produced about 28,300,000 tons in the year 1920 and about 20,000,000 tons in 1921. Central Pennsylvania is the nearest bituminous coal field to the great consuming centers of the East. The aggregate tonnage of railroad fuel coal originating in this district was approximately 18,000,000 tons during 1918. The total capacity of what is known as the central Pennsylvania coal field is about 60,000,000 tons. The territorial limitations of this association are covered by the mines located on the following railroads, together with their production for the month of October, 1922, and percentage of total production of this field: Buffalo, Rochester & Pittsburgh Railroad, 20,044
cars loaded; 23.26 per cent. Buffalo & Susquehanna, 3,164
2112 cars; 4.02 per cent. These figures are estimated for the Buffalo & Susquehanna. The Erie 3,012 cars; 3.50 per cent. Cambria & Indiana, 4,545 cars; 5.27 per cent. Huntington & Broad Top, 1,385 cars; 1.84 per cent. Johnstown & Stony Creek, 614 cars; .71 per cent. New York Central, 13,462 cars; 15.62 per cent. The eastern region of the Pennsylvania, 18,974 cars; 22.02 per cent. Central region of the Pennsylvania, 1,531 cars, [sic] 17.79 per cent. Pittsburgh & Shawmut, 1,502 cars; 1.74 per cent. Pittsburg, Shawmut & Northern, 1,501 cars; 1.74 per cent. Pittsburgh & Susquehanna, 700 cars; .81 per cent. In the district served by the New York Central and the Erie, jointly, 1,446 cars; 1.68 per cent, with a total of 86,178 cars, or 100 per cent. This association protests against the present method of distribution of privately owned coal

cars and other assigned coal cars, and prays for relief from and requests the discontinuance of the practice of taking cars owned by the carriers to certain mines, and privately owned cars to certain mines. This association is opposed to the continuation of the distribution of cars to mines during car shortages under present practices and rules, and suggests the following general principle to use as a basis for the distribution of open top cars suitable for the transportation of coal: (1506) For the public welfare and to avoid discrimination, we recommend that all open top equipment should be equitably and uniformly apportioned among the industrial users thereof. During periods of car shortage all open-top equipment owned by carriers or others suitable for the transportation of coal shall be distributed on a percentage basis regardless of ownership. (1507) The percentage shall be determined by dividing the total number of cars available by the mine ratings.

By Commissioner AITCHISON:

I want to have ratings established for all users of open top equipment suitable for the transportation of coal. The association
2113 further recommends that a percentage allotment of open top cars be made to anthracite mines, quarries, sand pits, steel mills, brick yards, and others, as well as to coal mines during periods of car shortages. This association therefore respectfully requests the commission to require an even distribution of open top cars to all users thereof, including bituminous coal mines. I do not contemplate a general pooling of the equipment at this time. I would prorate the cars that are available for distribution by a carrier whether they are owned by it or otherwise. (1508) As to the distribution of cars to railroad fuel producers, in general, public utilities other than railroads do obtain their fuel requirements through the common practices of trade without the right to use assigned cars. Railroad fuel requirements can be obtained in the same manner. Emergencies in all cases may be cared for by the Interstate Commerce Commission. Assigned cars for railroad fuel decrease the cost of fuel to the carriers.

By Mr. LIVERIGHT (1509):

Many railroads, prior to May, 1918, and subsequent to April 5, 1920, used railroad-owned open top cars on a guaranteed daily supply for the purchase of railroad fuel coal. This is the phase of the assigned car practices which has resulted in discrimination in the distribution of common carrier equipment. Railroad owned mines, as mines, are entitled only to their proportionate share of the available equipment.

By Examiner BARTEL:

It is a fact that subsequent to April, 1920, carriers were getting their cars for their fuel purposes under an order from the commission.

By Commissioner AITCHISON:

As to whether that is what the commission should do in times of emergency, it is a question of degree of emergency. We
2114 absolutely concede the desirability of the commission's meeting an emergency by the distribution or the direction of distribution of open top cars.

By Mr. LIVERIGHT (1510):

Railroads are dedicated to the public use. The owners of private cars enjoy special consideration in the use of power, tracks, terminals, and general railroad facilities. During the 1920 car shortage, some of which was due to insufficient motive power, users of private coal cars received 100 per cent of their requirements regardless of shortage of power, while unassigned car users enjoyed a very much lower percentage of cars because of unfair distribution of motive power. Privately owned coal cars should be generally distributed by the carrier, and ownership of coal cars treated as transportation business. If a man elects to buy private cars he enters the transportation game, and might expect his revenue or return on his investment in the general use of the same, and not in individual use of that car. In Bulletin No. 6 of the Pennsylvania System, showing distribution (1511) of cars for bituminous coal loadings for the month of August, 1920, there are three columns. Selecting five mines on the Pittsburgh division, South Fork district, the name of the mine, the number of cars assigned and the number of cars loaded, are: Maryland shaft, 808; 280. Eureka No. 31, 320; 63. Eureka No. 35, 960; 624. Eureka No. 36, 1,190; 839. Eureka No. 42, 770; 406. Or a total of number of cars assigned, 4,048; number of cars loaded 2,212. There were 1,836 empty cars standing at these mines, or a waste of 83 per cent of cars, or a surplus of 83 per cent for those mines. (1512) The operator doing a commercial business, who receives no assigned cars and owns no private cars, is dependent upon the daily allotment of unassigned equipment. He is frequently placed in the position, owing to the lack of an adequate car supply, where he fails in the per-
2115 formance of his contracts.

By Mr. FLETCHER:

The cars just referred to were private cars. We contend that the private car in such cases as we have mentioned results in a gross discrimination of the use of railroads in favor of private car owners. The railroads furnish everything but the cars—locomotives are used for this preferential movement—the right of way, the rails.

By Mr. LIVERIGHT:

I have given consideration to the subject of abuses resulting from shortage of motive power with respect to privately owned or railroad fuel cars as shown by practices in the Pennsylvania district that I represent. (1513) It is a fact that assigned cars as they

are used in central Pennsylvania are susceptible of an easier movement by the carriers than the promiscuous unassigned or commercial car. The local situation in central Pennsylvania is that it is practically a runaround service or shuttle service from the mines to the piers of one company or from the mines to the plant of another. The same thing obtains with respect to mines which furnish large fuel supply tonnage in trainload lots, such as the Logan mines. As a result of the following of the line of least resistance, there has been a modification, preferential in its nature, of the motive power of the Pennsylvania Railroad for the use of these assigned cars. (1514) That applies west of Altoona. It has resulted in disastrous shortage in commercial cars to the district west of Altoona. As explaining this, from the daily performance sheet of the Pennsylvania R. R. for November 8, 1922, we find that on the Pittsburgh, East End, and the South Fork districts, the Pittsburgh, East End, required 405 cars and the South Fork 830 cars. There were available on the Pittsburgh, East End, 17 cars and the South Fork district 357 cars. The assigned on the Pittsburgh East
2116 End were 17, and on the South Fork 315, leaving unassigned on the Pittsburgh East End none, and 42 unassigned on the South Fork. A similar summary was made for the eastern region. (1515) The Crescent division requirements were 205; available, 150; assigned, 42; unassigned, 108. On the Crescent division, C. & I. branch, 272 required; 137 available; 26 assigned and 111 unassigned. On the Cherry Tree & Dixonville, 516 required; 373 available; 218 assigned and 155 unassigned. On the Tyrone, 595 required; 291 available; 141 assigned, 150 unassigned. On the Snow Shoe, 27 required; 32 available; 21 assigned; 10 unassigned. Making a total of 1,615 in the eastern region required; 983 available; 448 assigned; and 514 unassigned, as compared with the central region, which is west of Altoona, with 1,235 required; 374 available; 332 assigned; and 42 unassigned.

By Examiner BARTEL:

From the reports of the carrier we are unable to determine whether a car is a Berwind-White car or an assigned car for railroad fuel. The Berwind-White Company has a good many mines in that district where they assign cars.

By Mr. CURRY:

Those Eureka mines are Berwind-White mines.

By Examiner BARTEL (1516):

The Berwind-White operates the mines at which they place their own cars. I presume they own them. I understand they also place private cars where they buy a portion of the output. Wrights, I think is the name of the company. That is the only one I have in mind at this time.

By Mr. LIVERIGHT:

The movements in grades on the railroad were easier east of Altoona than west. I am not certain that what I have testi-
2117 fied to with respect to the central region was exclusively motive power. It is at least bad distribution and presumeably motive power. I discussed the subject with some of the car distributors and they indicated that it was motive power shortage. (1517) They said they were making every effort to relieve this overage in the eastern region as compared with the central region. In the previous months we were in some difficulty in getting an adjustment for the Pittsburgh East End and the South Fork branch, and we appealed to the commission. An agent came into the field, and in a very short time the percentage distribution on the South Fork and East End approximated 100 per cent for about a week, and then it dropped again.

By Examiner BARTEL:

As to the situation now, before I left, for the first fourteen days it was not good, but I saw some of the chaps in the field yesterday and they said the eastern region was getting a zero percentage of distribution and that the central was coming back to its own.

By Mr. LIVERIGHT:

The mal-distribution to which I refer as being corrected through the help of the commission was a question of regional distribution and not inter-region.

By Examiner BARTEL:

There is a great deal of those [practices]. (1518) As a result they could not give the central region the cars which they were entitled to and they placed them at the eastern region where they could be used, and now they are trying to equalize.

By Mr. LIVERIGHT:

Certain exhibits have been prepared under my supervision and direction. (1519) The first exhibit shows that 26 Class I railroads,
using approximately 18,000,000 tons of bituminous coal dur-
2118 ing 1920, obtained their fuel without the use of assigned cars.

The supporting data for this exhibit was abstracted from Exhibit 18, offered by the carriers, supplemented by tonnage information from the Interstate Commerce Commission records.

The statement referred to was offered and received in evidence as Exhibit No. 61. (1520)

The next exhibit shows a summary, abstracted from the monthly bulletins, March, 1920, to January, 1921, inclusive, of the eastern and central regions of the Pennsylvania Railroad. This exhibit shows, by months, the total number of assigned and unassigned cars, together with percentage [that] each is of the total; also shows the requirements of commercial shippers, together with the cars charged and percentage of commercial distribution; and shows a

composite percentage of distribution that would have been in effect if assigned cars had been prohibited. As an illustration take the eastern region, month of August. The commercial distribution was 34.4 per cent. If the assignment of cars were prohibited, the distribution would have been 54.3 per cent to all users. The commercial shippers were charged with 11,111.4 cars during August, and would have received under the composite percentage of distribution, 17,552.7 cars, or an increase of 6,441.3 cars.

By Examiner BARTEL (1521):

95 per cent of the available cars were unassigned in the month of August.

By Mr. LIVERIGHT:

That was before any great demand for coal had arisen. There was no car surplus at that time, but there were few unassigned cars.

By Examiner BARTEL:

In August the percentage of unassigned is 52.4 of the total
2119 of 22,556.7 cars. The commercial shippers in August required 32.325 cars but were charged with only 11,111.4 cars or 34.4 per cent. One is the per cent of requirements and the other the percentage of available cars.

By Mr. BROWN (1522):

The total cars required includes the unassigned and assigned, while the net requirements show the requirements of commercial shippers using unassigned cars.

By Examiner BARTEL:

The aggregate mine ratings are shown in these bulletins and would be approximately identical with our total requirements.

By Mr. LIVERIGHT:

I adopted the column heading used by the Pennsylvania Railroad in its bulletins. The mal-distribution of unassigned cars between regions is shown in next to the last column. Due to transportation difficulties and orders of the commission, a five per cent difference in the percentage of monthly car distribution between regions might be expected. It is believed that it is unreasonable to have the wide variations shown, particularly when the central region had a 15.3 per cent excess in car distribution over the eastern region during August, and 13.9 per cent excess during October. Private car owners during (1523) this period received practically 100 per cent car distribution.

(The statement referred to was offered and received in evidence as Exhibit No. 62.)

My next statement is one showing increase in rate of production as the period or duration of operation decreases, and an estimated potential capacity, based on 1920, of the bituminous coal mines in the United States. This exhibit develops a principle: That the rate

of production increases as the period or duration of continuous operation decreases. This is exemplified in the information filed by the Government and the Pennsylvania Coal & Coke Corpora-
2120 tion. For the latter, during 1920, the daily average output for the maximum monthly output was 11,217 tons, while the average daily output for the maximum weekly output was 12,332 tons, the maximum output for one day was 14,544 tons, and the combined daily colliery maximum [based on the highest day's performance for each colliery] was 20,042 tons. (1524) The average daily output for 1920 was 9,866 tons. We obtained from the Geological Survey the daily production for the year 1920. The information furnished supports very closely the information furnished by the Pennsylvania Coal & Coke Corporation. We were unable to obtain from the Geological Survey the maximum production on each railroad so as to get a composite for the United States.

(The statement referred to was offered and received in evidence as Exhibit No. 63.)

The statement supports and verifies the increase in mine ratings during a period of car shortage. During a period of car shortage it was commonly stated that mine operators were inflating their ratings while as a matter of fact the period of continuous operation was being diminished, (1525) due to the inability of the railroad to furnish railroad cars, and hence would increase the rate of production and increase the ratings of the mines. Conversely, this principle is true: when the railroad begins to increase its car supply it automatically increases the period of continuous operation and hence decreases the rated capacity of the mines. The column headed "Total cars required" on Exhibit 62 supports this position in a general and detailed way. For example, in the month of June in the eastern region the mine ratings or the requirements were for [4]3,393.7 cars. That was a period of great car shortage. In January, 1921, for the eastern region the ratings for these same mines, or the requirements—the demand had dropped and the car supply was liberal—were 17,840.8.

By Mr. FLETCHER:

The January, 1921, requirements were practically the same as the ratings. (1526) They were made up from the December
2121 performance. December was the largest month of production we had in central Pennsylvania.

By Commissioner AITCHISON (1527):

The maximum production of the Pennsylvania Coal & Coke Corporation for a single day is 14,544 tons. In order to do its share of producing the greatest amount of coal that ever was produced in the United States in a single year it would only have to produce 9,866 on an average. That is substantially the same figure that is to be found with respect to the United States as a whole. In other words, as 72.6 is to 53, we have the amount of working time which would be necessary to supply the greatest amount of coal ever needed

as compared with a potential capacity of the bituminous mines of the country.

2122 (1528) The next statement shows the names of companies owning private hopper gondola cars from 1902 to 1921. This information was abstracted from the June Equipment Register for each year. It is the same register from which Mr. Gutheim took his figures, but he used a different month. It will be noted on sheet 3 that the maximum number of private cars, 30,279, was owned by 37 companies in the year 1907. From 1916 to 1920 there was a gradual increase both in number of cars owned and number of companies owning the same. (1529) During the year 1921 there was a great increase in the number of cars owned and number of companies owning same, there being 64 companies owning 26,007 cars. Two companies own the majority of the private cars operating in central Pennsylvania, the Berwin-White Coal Mining Company and the Bethlehem Mines Corporation, owning 4,400 cars out of a total of 26,007, or 16.9%. In addition thereto there are a few small mining companies owning private cars and industrial owners of private cars who allocated a portion of their own cars to this field. The number in the latter case is indeterminate. It is conservatively estimated that 20% of the total number in the United States of privately owned hopper gondola cars are used in the central Pennsylvania field. This field produces about 9% of the total production of the United States. This wide difference in percentage indicates why the private coal car evil is aggravated in central Pennsylvania.

(Statement referred to was offered and received in evidence as Exhibit No. 64.) (1530)

By Mr. LIVERIGHT:

My next statement is one furnished by the Department of Mines of the State of Pennsylvania, showing the number of days worked during the year 1920 by certain mining companies owning coal

2123 cars and the Logan Coal Company using assigned system cars for railroad fuel. It has just been called to my attention that the Cambria Steel Company does not use railroad facilities, and it should therefore be excluded from this exhibit. Eliminating that, the average number of days worked for all bituminous companies in the State is greater than the number of days worked by users of system cars, as the total includes the days worked by owners of private cars. (1531) The detailed data for days worked for users of system cars is not available. Hence it is a conservative conclusion that the owners of private cars worked about 42 or 43 more days or about 18% more than users of system cars during a period of maximum demand for coal.

By Commissioner AITCHISON:

This is an arithmetical average.

(The statement referred to was offered and received in evidence as Exhibit No. 65.)

By Mr. LIVERIGHT:

Next is a statement showing the relation for certain companies between commercial and assigned car distribution from March to December, 1920, inclusive. As to the class of operators included in this exhibit, the Logan Coal Company loads system cars for railroad fuel, while the other operating companies own private cars. The summary sheet for ten months shows the total number of cars required (1532), total cars available for each company, cars loaded, percentage of cars available to cars loaded, percentage of cars loaded to cars required, percentage of cars available to cars required, and percentage of commercial distribution. It will be noted that the five companies for a period of ten months during which there was a maximum demand for coal, required 103,277.5 cars. There were available for these companies assigned and unassigned 128,447.7 cars or their reported requirements were 25,170.2 cars less than
2124 were actually furnished. The Logan Collieries Company used assigned cars for railroad fuel. The number of cars actually loaded was 83,066.8 or 45,360.9 cars less than were furnished. Following the comparison between commercial distribution and a like percentage for the assigned car users, it will be noted (1533) that commercial distribution was slightly over 50%, while the users of assigned cars enjoyed 124.4%.

(The statement referred to was offered and received in evidence as Exhibit No. 66.)

Next is a statement showing car distribution on the Conemaugh division of the Pennsylvania Railroad from March to December, 1920. This division is one of the largest railroad fuel divisions in Pennsylvania (1534), and extends west from Blairsville intersection, the western terminus on the Pennsylvania Railroad of the territory covered by the Central Pennsylvania Coal Producers' Association. It will be noted that for a ten months' period from March to December, 1920, inclusive, there were loaded 82,290 cars, while 115,739 cars were available on this division for loading.

By Commissioner AITCHISON:

There must have been cars standing over. The figure available for loading is reported in the bulletins. It usually means placed.

By Mr. LIVERIGHT:

(1535) The central region for this ten months' period enjoyed only a 50.2% distribution, while this division enjoyed, including assigned and unassigned cars, a 72.3% distribution. From the underlying data used in this exhibit it was determined that there were 23,691.9 cars available at mines using unassigned cars only, and these mines loaded 19,312.6 cars or 81.52%. There were 80,335.3 assigned cars, and these mines loaded 57,429.9 cars or 71.49%. In
2125 other words, with respect to the assigned-car mines, there was an additional wastage of about 10% or 8,000 cars.

(The statement referred to was offered and received in evidence as Exhibit No. 67.)

(1536) Our association gets daily records of car distribution of the Pennsylvania Railroad Company. We have field agents at various points of distribution who copy the car distribution reports of the railroad as posted by the railroad in the railroad company's office. The railroad has been very courteous in furnishing this detailed information. I have a day by day summary here from which I have compiled Exhibit No. 68. (1537) It shows the various percentages of commercial distribution in the eastern region and the South Fork and Pittsburgh East End districts of the Pennsylvania Railroad, and the average daily per cent of distribution for the month of November.

By Mr. FLETCHER:

It is the total for November of this year only. I did not make accumulative showing for October and November.

By Mr. LIVERIGHT:

As to why I did not accumulate October and November, we had some difficulty in balancing the distribution on the South Fork and East End districts prior to October 24. Subsequent thereto additional cars were placed in these districts and we had some difficulty in obtaining the total performance (1538) in the central region prior to November 1st. I made inquiry of the car distributor and was advised that the distribution prior to November 1st had been balanced between districts in the central region. Whether or not there is a balance of regional distribution between regions, I am unable to determine at this time.

By Mr. CARMALT:

Cresson and Tyrone are in the eastern region.

2126 By Mr. LIVERIGHT:

My figures indicate that from November 1st to 14th, inclusive, there was a commercial car distribution on the East End branch of the Pittsburgh division of 23.82% and on the South Fork 28.16%. The Bellwood branch is in the eastern region. Only the first two of these [East End and South Fork] are in the central region.

(The statement referred to was offered and received in evidence as Exhibit No. 68.)

I have made up a daily record beginning October 19 and continuing to November 14 of this year. It covers the same territory as is shown in Exhibit No. 68. (1540) We have on the South Fork branch a mine, named the Maryland Shaft, which is a private-car mine. (1539) On November 11 its requirements were 18 cars. Available cars were 10. There were no assigned cars and 10 unassigned cars, and it was entitled to 8 or an overage of 2 cars. A similar distribution will be shown on the 13th, when the figures for

the same mine were: Required, 18 cars; available, 5 cars; assigned, —; unassigned, 5; entitled to, 8.7; short, 3.7. After examining the distribution records for a long period of time it is the first time that there have been no assigned cars at this mine. For this short period of two days I understand that the Pennsylvania Railroad, due to shortage—insufficient motive power, advised private car owners that they would receive (1541) their distributive share identically with the commercial distribution. This policy lasted but two days. They are now distributing private cars as received. For temporary relief, pending the disposition of this case by the commission, we desire to have a percentage distribution of motive power between available system cars and private cars, so that each will receive their proportion of motive power in accordance with the rated capacity of the mine. The Pennsylvania Railroad assigns cars for railroad
2127 fuel in our district. It began this subsequent to September 20 and prior to October 19. (1542) I can not give the precise date. I do not know anything about the storing of coal for engine use by the Pennsylvania Railroad Company.

Cross-examination by Mr. FLETCHER:

(1543) Referring to my Exhibit No. 62, I would say that the number of cars required is substantially the same as the rating of the mines at that time. As to why the rating of those mines dropped from 29,145 in December to 17,840 in January, that was due to the opportunity to work full time. The reason why car supply in January, 1921, went to 106% was that the demand for coal decreased. I would say that the 17,840 cars ordered in January were very close to the rating. (1544) As to the falling off of 41,532 cars required in August to 36,864 in September, that came down probably due to the increase in number of assigned cars and increase in your opportunity to work there. Your assigned cars were running very high. (1546) It is a fact that the words "total cars required" mean the number of cars for which we had orders and not the number of cars which represents the rating. My proposition is that commercial cars will enjoy the same percentage of use of the available motive power that the assigned car shipper enjoys. (1547) When I mentioned the capacity of the mine, I had in mind the movement of the empty cars to the mine and that empty private cars should not be moved in excess of the number of empty unassigned cars. We would practically not be using the assigned car rule at all. I am not asking the commission to anticipate and decide the private car end of this matter pending its final conclusion. There are various elements affecting transportation, one of which is motive power. How much it affects it at one time or another I am unable to say, but we desire an
2128 equitable and fair apportionment of motive power as we do in the matter of cars. (1548) The Pennsylvania Railroad in the past has furnished private car owners with 100% distribution. Now, at some time at which these private car owners have received 100% distribution there was a shortage of motive power and ship-

pers using unassigned cars at less than 100%. Now, it is during such periods that we want motive power allocated on a percentage basis. If there is a shortage, I should say that the private car mine is only entitled to have the percentage that the unassigned mine enjoys (1549), both in the placing of cars and the pulling of loads. (1552) I said coal cars ought to be distributed without respect to ownership. I mean without respect to ownership by private car owners and railroads. I would not be in favor of pooling all the open top equipment in the country without regard to ownership at this time. I mean the available cars on a particular railroad and leave out the question of ownership. (1553) I do not think it is wrong for shippers to own cars. But their cars, if there is a car shortage, must be taken and placed at some one else's industry. There would be very little incentive to own private cars under those circumstances. If that theory is correct, private cars might and might not disappear.

By Mr. CARMALT:

As to whether I assume in my exhibit No. 62 that the private cars thrown into the general distribution in the computation there will remain on the Pennsylvania Railroad between those two divisions (1554) it assumes that number of cars available. That number might be maintained by purchase of cars by the carrier. This computation assumes that the private cars would remain on the Pennsylvania Railroad. (1555) I am advised by an operator who just came in that the Pennsylvania is now making a regional adjustment by practically delivering no cars in the eastern region and a rather liberal supply in the central region—adjusting these differences
2129 indicated upon the exhibit. The owners of private cars in the Central Pennsylvania region supply a very large percentage of the eastern public utility corporations with coal. (1557) As to whether steel companies are included, which supply gas to municipalities, I do not know the distribution of their products.

By Mr. YOUNGER:

If a carrier serves a destination to which a large amount of coal moves from the lines of another carrier, I would not change the procedure on that so as to appropriate the cars in which that coal moves and distribute those cars among the mines. (1558) Cars should be returned to the owners in accordance with the car-service rules.

By Mr. CURRY:

If the assigned-car rule were abolished, I am of the opinion that it is practicable for the carriers to obtain a steady quantity and quality supply if they will buy coal in the ordinary way. That is, there ought to be a cordial relationship between railroads and mines located on their lines, because they have been there a long time and will be there longer; they purchase coal year after year from the same group and with or without assigned cars they can follow the

ordinary rules of trade and the common business to obtain their fuel requirements. Under some abnormal condition, or to meet an abnormal condition the carrier might justly and economically store slightly over a month's supply and if a further emergency developed the commission could relieve the congestion. (1559) The method of contracting so as to avoid the necessity of contracting for an excess supply of coal is common to all commercial sales. There is usually a maximum and minimum requirement in there. The railroad would not necessarily take the maximum if there was 100% car supply; they would only take the minimum. I believe that
2130 maximum and minimum contracts would enable the carriers to secure suitable supplies of coal if they abolished the assigned-car rule. As to public utilities obtaining a regular supply of coal in my district without the use of private cars, I think the Philadelphia Electric Companies acquire their coal without the use of assigned cars. I do not know for how long a period they store their coal. As to what the failure to equalize the percentages between districts has to do with assigned cars, in the one example which I cited there was a movement (1560) of assigned cars to points west of Altoona and very few unassigned cars moved. Perhaps, however, the relation between regions is more a question of car distribution than of assigned cars. As to whether I intended to bring in the question of motive power on that, I did, in the example cited in the first part of my testimony, show that. I can not cite a specific example in which trains of assigned cars, private cars, were moved and commercial cars were not during this period of car shortage. I can cite the result of the car supply. I never bought or sold any coal and can not say from experience whether the railroads in our region have sought to use the assigned-car rule as a club to secure low prices for coal.

By Commissioner AITCHISON:

(1563) As to how a commonwealth could protect itself if mines under contract to furnish it coal for jails, hospitals, and public utilities said that they intend to use the cars that are supplied to ship coal to those paying higher prices rather than to the commonwealth, the commonwealth will get coal. (1564) Emergencies of that kind must be met, regardless of the method followed. I feel they can be met without the use of the assigned car. The case cited is an emergency. It can not be met except by the assigned car.

2131 Commissioner AITCHISON. In one case where the carrier has a valid contract even prior in time, if that cuts any figure, the coal operator absolutely refused to fill that contract and claims his right to fill some other contract because of reasons which seemed good to him. (1565) In such a case could the carrier protect itself, even if it had done all that you suggest it should do, except by some other process stepping in, either injunction or order of this commission, or assigned cars?

The WITNESS. To answer that question, you would have to use the same means in requiring coal for the carrier that you propose to use for furnishing coal to these companies stated. However, I cannot help but feel that the case of the one who would ship on a higher contract is not representative of coal operators, at least not the men that I have come in contact with; and I know many.

Concerning the suggested spreading of contracts, I am indifferent to the spread. I think the railroad knows where it wants to get its coal in a general way. (1566) Perhaps it could expand the number of producers from which it orders its fuel. I am willing to let them go along their own way on that. We have certain high grade coals but the railroad would not want to pay the price. They do not require that quality of coal. We have low grade coals suitable for transportation uses. The cost of production is lower. I would not want to force that high grade coal on a railroad, nor an extremely low grade unsuitable for use. I think they ought to be allowed discretion in the purchase of their necessities.

By Mr. LIVERIGHT:

The New York Edison Company gets a large part of its
2132 coal supply from our region without assigned cars.

By Commissioner AITCHISON:

I think in both 1920 and 1922 the New York Edison had priority orders. (1567) As to differentiating between that and an assigned car, an assigned car is a permanent affliction.

By Mr. FLETCHER:

I recognize the fact that we have to use assigned cars in an extreme emergency. The only question is what constitutes an extreme emergency.

By Mr. BALLARD:

And who is going to determine it?

By Commissioner AITCHISON:

The coal operators' objections to the assigned car, as expressed to me and within my knowledge, are stronger as the car shortage gets more acute.

2133 (1568) W. C. HUBER, called as a witness, and being first duly sworn, testified as follows:

Direct examination by Mr. LIVERIGHT:

I live at Philadelphia and am a coal operator, being vice president of the Arrow Coal Mining Company, a producing company having two mines on the South Fork division of the Pennsylvania Railroad, one at Arrow, Pa., and the other at Rockingham. I do not know how many mines are on that branch. The branch connects with the main line at South Fork. Our Arrow No. 1 mine is about five miles in an air line from Windber; our Arrow No. 5 mine is about ten

miles (1569) in an air line from Windber, but by railroad perhaps 20 miles. We are not a user of assigned cars. We rely on system cars. We have had very serious trouble in meeting our contract obligations due to car shortage. In 1920 we had a contract with the Baldwin Locomotive Works. Our alleged delinquencies were brought to the attention of the Interstate Commerce Commission at the time. They complained through their Mr. Garrett of our performance on that contract and we received a letter from the commission with regard to it. I attribute our troubles in the matter of car supply in our district to the assigned and private car, particularly the cars of the Berwind-White Coal Mining Company. We purchased the Arrow property in September, 1916. Our No. 1 mine then had a rating of 20 cars per day. By the spring of 1917 the rating had declined to eight cars a day, and we scarcely had enough labor to load five cars per day, due to the extreme car shortage through that winter of 1916–17. (1570) The service was very unsatisfactory all during the war period, but in 1920 a situation developed that I had never seen anywhere. The rating of our two mines was then 30 cars a day. In April, 1920, we received 30 per cent distribution. In May the supply was 22 per cent. In June it was 20 per cent. By the 18th of June we had lost 75 per 2134 cent of our men. The Arrow No. 1 mine was forced to suspend. One of our motor drivers at Arrow No. 5 had quit and the second one threatened to leave. We would then have had no way of hauling coal from the mouth of the mine to the tipple. In those circumstances I called on Mr. Scheaffer, chief of transportation of the Pennsylvania system and he said he was impressed with the seriousness of our particular case. But the damage was done. We had lost our labor, and our production in 1920 was 75,000 tons less than our output in 1919, due to those cars. As to the relation of assigned or private cars to the diminution in output at our mines, we are surrounded by those mines using private cars and assigned cars. We are so close to that situation that we can not hold any labor against it. We have complained times without number in the last five years to the Pennsylvania R. R. operating department. (1571) The same condition obtained in 1922. It is fair to say that we had a suspension of mining on April 1st and our mines did not start to get in operation until some time after the so-called Cleveland agreement; but the latter part of September our mines started coming back and from then on we had very poor car supply, particularly through the first three weeks in October and for the first three weeks in November. There has been railroad fuel car distribution up our way. I think close to one hundred cars per day on the South Fork division, average. We have the data from November 8 to 17, inclusive, showing the distribution of assigned cars and system cars. During that period of eight days it shows that there were a total of 1,029 system cars passed through South

Fork for the South Fork division, and 836 Berwind cars. I
2135 have the figures between the 8th and 14th, inclusive, and they show (1572) approximately 536 system cars loaded with railroad fuel on those six working days out of a total of 763 system cars placed on the division. For the same six days 541 Berwind cars passed through South Fork. I have no exact information as to when they were placed at the mine. I and my associates up our way had inspectors out making a survey of the situation. We had men constantly at South Fork to get the information. I have no report on misapplication of motive power of the railroad as between assigned and unassigned cars. Further on this subject, I would like to say that this experience in 1920 practically destroyed the good-will of our company. Our performance on contract was so bad that our customers could not realize that we were doing everything in our power. (1573) I have a copy of a letter bearing date of June 11, 1920, addressed to Mr. Sheaffer.

(The letter referred to was offered and received in evidence as Exhibit No. 69, and was latter withdrawn for the purpose of supplying copies to the commission and counsel.)

Mr. LIVERIGHT. I offer in evidence a copy of the reply of Mr. Sheaffer, dated Philadelphia, June 16, 1920, as Exhibit No. 70.

(The letter referred to was offered and received in evidence as Exhibit No. 70.) (1574)

Concerning the car supply at our mines in November, 1922, during the week beginning October 30 and ending November 4 we had an average of 20 per cent. During the week beginning November 6 and ending November 11 we averaged 25 per cent. During the week beginning November 13 and ending November 18 the average was 30 per cent.

Cross-examination by Mr. CARMALT (1575):

2136 When we started up the latter part of September we operated non-union.

By Mr. YOUNGER:

I said that during the period of car shortage we were prevented from fulfilling some of our contract obligations. We made a miserable performance on our contract. We did not at that time sell any coal that had not been previously committed by contract. Our policy has been to contract for the output of these mines each year.

By Mr. FLETCHER:

By output I mean based on the tonnage we had been producing in the previous year. 1921 was a period of free car supply. (1576) I think it would be perfectly safe to base our sales for 1922 on what coal we sold in 1921, because we had depressed business all through 1921, and our tonnage was subnormal on that account. I think it has been the practice of a good many operators to contract from 60 to 70 per cent of the mine ratings during the war period; the uncertainties in the situation were such. An operator can handle a situa-

tion like that, a shrinkage of one-third or one-fourth normal supply, but it is absolutely impossible to cope with a shrinkage of three-quarters of your capacity for a period of four months. I do not think that if there had been no assigned cars and no private cars I would have had a full car supply on the Pennsylvania during these times of which I complain, but the records will show that during that period the division east of Altoona averaged most of that time from 50 to 60 per cent car supply. They had some private cars over there but not to the extent of the Pittsburgh division. (1577) The trouble has been largely a question of motive power of the railroad. During these periods of car shortage they could not get the cars through Altoona and over the mountain.

By Mr. CURRY:

2137 I do not recall having assigned cars in August, 1920. (1578) We have loaded coal for the Pennsylvania Railroad at our No. 5 mine, but I did not recall that we loaded any in 1920. When we purchased the Arrow property, the Arrow No. 5 mine was just starting, and we had an object lesson at Arrow No. 1 through our experience in the winter of 1916–17, and we took a fuel order at No. 5. There was no other way to get our development. As to whether that sort of an arrangement gave us an advantage over a commercial mine, our only comparison has been with the mines around us which were practically all on private cars. Those are the things we had to reckon with. They are so close up to that situation it was a question of whether you could operate or could not. We had no definite contract as I recall for supplying coal to the Pennsylvania. We just drifted into that thing from necessity and kept on with it. And as I remember, the average number of cars placed was about 8. (1579) As to whether railroads use the assigned car rule as a sort of club to beat operators into selling their coal at low prices, I would not like to put it that way; but the fact remains that the railroads have usually bought their coal at very much lower prices than the commercial user. We have not had any railroad employe make the proposition to us that if we would ship railroad fuel at a certain specified price he would give us a full car supply, but if we did not we would get a very small per cent of commercial cars. The railroads have had a price that they determined to pay for fuel, and the operator knew that it carried the assigned car privilege with it. (1580) The principal mines using the assigned private cars on our division are those of the Berwind-White Coal Mining Company. I have specific instances that I could cite as showing that the motive power of the Pennsyl-
2138 vania Railroad on that division was absorbed by the Berwind-White private cars to the exclusion of a fair distribution to our mines and to others similarly situated. The present rating of the Berwind-White Coal Mining Company is 110 cars a day. During this period from November 8 to 16, inclusive, they received 836 cars, practically up to their full rating. They were

placing cars with other operators adjoining us. I wrote a letter of protest to Mr. Sheaffer, under date of November 7, in which I called his attention to the fact that during the previous five working days we had had no car supply except one small distribution of 30 per cent; and on the day following my letter there were 24 Berwind cars went to the Loyal Hannah No. 6, only one-half a mile from my mine. There were cars that went up to the Wright's Coal Company, half a mile beyond that, showing that they had cars to place with other operators in our district. (1581) As to whether those cars were charged against the mines as part of the commercial supply, they are shown as assigned cars on the distribution sheets. I think those mines were shipping coal for the Berwind-White Company. They do not ordinarily do so; that is to say, the Loyal Hannah Coal & Coke Company has never shipped coal for the Berwind Company to my knowledge. I think commercial cars would have been available and could have been placed at the commercial mines on our division had there been additional motive power. The defense of the railroad has always been the operating conditions, the congestion at Altoona, in ability to get over the mountain, and so forth; but somehow or other these Berwind cars are always up there waiting to move. I do not say that the Pennsylvania Railroad deliberately gives a preferred movement to private cars of any owner, but at the same time we knew from the nature of the business these cars moved largely in solid trains to New York Harbor, and
2139 as an operator it is easier for the railroad to hook a locomotive on to a solid train of Berwind cars than it is to pick up system cars along the way, so that those cars, somehow or other, are always up there waiting to go over the mountain. (1582) The great question has been to get through the neck of the bottle at Altoona with the heavy loads on the Pittsburgh division. I feel that the private car is wrong in principle. As to obtaining coal without assigned cars, I think the railroads can fortify themselves against car shortage by storing coal at convenient points.

By Commissioner AITCHISON:

As to car shortages lasting a year and a half, I think the railroads have necessarily got to have some latitude in protecting their fuel requirements.

By Examiner BARTEL:

If the railroads would store coal during periods of great surplus at convenient points, I would not object to the using of cars to take it from the storage piles during a period of car shortage to the points of consumption. (1583)

By Mr. CURRY:

I would not be willing to sign the so-called preferential contract with the railroad by which, for example, during a period of one-third car supply I would guarantee to give the railroad one-third of the

rating of my mine, because I do not think you could deal commercialy on that basis.

By Commissioner AITCHISON:

I would not be willing to give a bond to do it. I think that you have got either a commercial mine or a fuel mine. I do not believe that you can straddle that proposition. My solution does not involve a general distribution of the railroad orders as among all of
2140 the mines in the district, or all of the mines that are willing and able to supply the proper grade of coal. I think that would be an economic waste. I think, however, the railroads could deal with a larger number of operators, and that in so doing they would create a better cooperation on the part of the coal operators.

Redirect examination by Mr. LIVERIGHT (1584):

I recall now that in August, 1920, we received some priority orders for some hospitals up in New England, and those cars were assigned. We had a contract with a traction company, a public utility in Delaware. Those cars were assigned. I could not recall that we had loaded any railroad fuel in 1920.

By Commissioner AITCHISON:

We did not get our pro rata of our rating in addition to the cars. They are an arbitrary distribution, as I recall it.

By Mr. FLETCHER:

I think those cars were not counted at all. We had an obligation to these people (1585), and they simply got that much precedence over our other contract customers. I think they could not get it in any other way at that point.

By Commissioner AITCHISON:

The object of my being here to represent myself is because we would like to get some relief. I am not appearing for any other operators, and was called simply on my own behalf as a volunteer witness.

S. C. HIGGINS, called as a witness, and being duly sworn, testified as follows:

I am traffic manager of the New River Coal Operators' Association, Mt. Hope, W. Va. I am not opposed to the ownership of private cars, but to the manner in which private cars are
2141 handled by the carriers, and more particularly (1586) the Chesapeake & Ohio, with which we are directly involved. Our mines in the New River district are served by two important carriers, the Virginian and the Chesapeake & Ohio Railroad, but only the Chesapeake & Ohio is involved when I mention private cars as concerning the New River district. We are in the midst of a very severe car shortage on the Chesapeake & Ohio, which is not recent but which has been continuous since the last of August; and while the situation was possibly due part of the time to the shop-

men's strike and considered as such, the conditions are not improving at the present time. Shortage of cars for the loading of coal can be caused by congestion of terminals, delay in movement, and lack of motive power to handle the business offered, and when you have these three causes you have but one result, that efficiency is not obtained from the few system cars which are left for distribution on the lines of the carriers. It is apparent that if a railroad is permitted to supply a hundred per cent car supply to mines owning private cars, there must of necessity be a preferential service given to these private cars because of the small number of private cars owned as compared with the larger ownership of the railroad itself. For example, the Berwind-White interests have mines in the New River district (1587) which are now operating, known as Leland & Minden 3 and 4. They have also Minden 1 and 2 and Wierwood, which are not operating. I will speak particularly for the mines which are operating. The New River district has averaged since about the first of September about one and a half days per week. I prefer to speak in days' work rather than percentage of time worked, as it makes it much clearer. We have worked about one and a half days per week at the system mines in the New River district as compared with six days per week averaged at the mines loading private cars, and to be more specific, in the month of October Leland
2142 mine, on orders for 195 cars, loaded 194; Minden 3 and 4, on orders for 846 cars, loaded 1,005. Rock Lick No. 1, a mine dependent on the C. & O. for cars, through its close association with Minden 3 and 4, found it necessary to employ the use of New River and Pocahontas cars, as they were not in the very best of shape at that time, their mine being directly located on the top of the mountain, and it was quite necessary in order to protect some of their contracts to do this. They ordered 187 and loaded 176. During the month of October the New River district mines depending on system cars ordered 29,687 cars and loaded 7,766 cars (1588); in other words, there were in one instance more cars loaded at Minden 3 and 4 than ordered during the month of October, which is not unusual because of the fact that at times the Chesapeake & Ohio had as high as 175 Berwind cars. I will speak of those as Berwind cars. So there were cars stored on the tracks of the carrier and the mines filled to their absolute capacity with cars. There has only been one instance, since the first of September, according to my best information, when any of the Berwind mines have been closed down on account of lack of cars. That was in the past two weeks when Leland mine on the Laurel Creek branch was closed down because of the agitation which has been given this matter by the operators in the New River district wherein they have insisted that Berwind cars were receiving preferential service on the part of the C. & O. We cannot but believe that such is the case, when we know that at Clifton Forge, one of the important distributing points of the C. & O., they will have one train of system cars and one train of Berwind cars standing side by side. Notwithstanding the fact that

there will be 175 Berwind cars in the New River field and the mine tracks loaded, the consist will show the first train going out as being (1589) a train of Berwind cars and later a train of system cars
2143 moves out. It has come to my personal attention that repeated requests have been made by the Chesapeake & Ohio officials especially that system cars be rushed, that they had more Berwind cars than they could handle, and invariably it has been the rule that Berwind cars would move out. The same condition maintained at Hinton when they would need in order to supply mines on what is known as the Piney Branch of the Chesapeake & Ohio, located in the New River field, system cars, and the consist of the train moving out would show a train of Berwind cars. The result would be that the train of Berwind cars would be set off at Quinnimont and block the facilities at that point to the extent that it would be impossible to get the loads out of Piney Branch and also to get the empties that were coming on the next train following into Quinnimont, so that they could be distributed to the Piney Branch, necessitating the movement to other points in the New River district where they were fixed better than possibly they were on the Piney Branch. Another incident of note occurred just last week. The Ford Motor Company have been sending private cars marked "FRDX" to the New River district for loading, moving those cars from Detroit over various routes to mines located in the Winding Gulf territory, a rather circuitous movement. On last Friday there were certain of those cars, twenty, I think, in Terry mine track because the facilities of the C. & O. were so congested that they could not move those cars by the regular mine run to the main line, which would have been Quinnimont. The cars were being delayed, which was only natural in view of the fact that we figure anywhere from three to six weeks or longer in moving cars westbound. However, these particular cars were ordered by the general superintendent of the Chesapeake & Ohio switched out and moved without delay, and they were moved immediately by special service.

By Mr. CARMALT:

2144 That was after they arrived at Terry. Terry mine track was used as a storage because of the situation maintaining at Quinnimont and on the main line. Another incident is a very unusual movement of those Berwind cars commencing on the 30th day of October. There is usually a shuttle made of these cars between the mines, Thurmont and Quinnimont, to Tidewater, but in the month of October out of a thousand cars ownership the total number of cars loaded was 1,375, indicating a very rapid turn around of those cars as compared with the Chesapeake & Ohio turn around. (1591) On October 30, the starting of 200 cars to the Lakes was commenced, and the first 20 cars left the yards at Thurmond on the 31st day of October. I find that the first 20 cars coming back from the Lakes arrived just two weeks later than the time they were loaded, indicating that those cars had made a turn around of two weeks to the

Lakes and back during a period when the Chesapeake & Ohio had a congestion ranging from 12,000 to 15,000 loads westbound which they cannot move on account of lack of motive power. That lack of motive power resolves itself into the fact that there is 29.5 per cent of the freight power of the C. & O. in bad order, with only a slight improvement in sight as indicated by the president of the C. & O. when we found it necessary to go to him and ask him how long we expected to continue working one day and a half per week.

2145 (1591) The matter has been brought to the attention of the Chesapeake & Ohio executive officials that preferential service has been given to private cars, and the matter has also been brought to the attention of the Interstate Commerce Commission. During the life of the Federal fuel distributing committee at Thurmond it was found necessary by the representatives of the Interstate Commerce Commission (1592) on account of a shortage of motive power and the lack of transportation facilities to order the Chesapeake & Ohio Railway to not give the private car mines other than the average given to other mines, and to meet that situation cars were actually hauled back at Tidewater, Clifton Forge, and even so far as Hinton to prevent cars coming into Thurmond and the distributing point for those private-cars mines in excess of the ability of the Chesapeake & Ohio to furnish an average distribution to that field. It might be said that the loading of these private-car mines, approximately 60 cars per day, should have no decided bearing on the performance of the New River district where we have a rating of approximately 1,350 cars. But we are confronted with the fact that the transportation facilities of the Chesapeake & Ohio limit our ability to produce coal more than anything else, and when the facilities of the Chesapeake & Ohio will not permit our mines to produce coal in the volume that they should, then the private-car mines should not be permitted to receive a hundred per cent car supply and the other mines customarily dependent upon the Chesapeake & Ohio for their cars a one and a half day's supply of cars. The congestion on the Chesapeake & Ohio is not improving, even though the shopmen's strike has been settled for quite some time (1693), but even with only one and a half days there has accumulated an enormous amount of westbound business.

By Commissioner AITCHISON:

2146 I was just about to ask that an order be issued, a temporary order if you please, that on account of the transportation conditions on the Chesapeake & Ohio, private cars not be supplied to a greater pro-rata share of equipment than is being supplied system mines when the facilities of the carrier will not permit the system mines to receive a greater amount. Our only thought in that was that if it was proper for the Interstate Commerce Commission to issue a temporary order during the life of the Federal fuel distribution committee, which expired about the first of September, such an order might be appropriate at this time as a temporary order.

By Mr. CARMALT (1594):

As to whether my proposition is that an emergency situation existed, the proposition that I have is that the immediate situation be taken care of for the future good. We are looking to the public interest, and it is not in the public interest to supply the cars and the facilities of the carrier to one mine. We are objecting to preferential movement at any time of private cars.

By Mr. FLETCHER:

My position is that private cars are all right if they are not given a preferential movement. As to whether this is a question not so much of distributing the cars as a preference in the use of motive power and other facilities (1595), all of the facilities of the carrier should be taken into consideration, in my opinion, in distributing private cars. If there is no shortage of motive power and the other facilities are equal, there would be no necessity for an investigation of the mine rating and car distribution rules, because it would automatically take care of itself.

"Q. * * * There might be a car shortage, might there not, and still be plenty of locomotives to move what cars you could move?

2147 "A. Congestion of terminals and lack of motive power are all related with car shortage, and in my experience I have not seen a free movement of cars when the railroad was capable of handling all the business offered result in a real car shortage.

"Q. I agree with you that they do contribute to what we commonly call a car shortage, but still there might be a shortage of vehicles in which to transport coal and, at the same time, be plenty of motive power. You can at least conceive of that, can you not?

"A. That could be possible; and there might be other transportation facilities in that way, and I would take them all into consideration." (1596)

When the assignment of private cars reflects in a discriminatory manner on the distribution of cars to other mines in the same district, that is what I object to. As to whether I object not to another mine getting more cars but to preference in the movement of cars, if they did not receive preference in the movement they would not receive more cars than the other mines. As to objecting if there is a mine using private cars on the Chesapeake & Ohio operating full time and three or four miles away a mine on the Virginian not using private cars but operating half time, that would be entirely a case of two railroads involved. I would not raise an issue then. I am raising the issue (1597) on a particular railroad where there are private-car mines and system mines. If there were different branches of the same railroad operated differently, my thought would still hold that as long as they are on the same railroad there should be equal distribution, that is, pro rata distribution. I would not say that the private cars should go into a mine other than the owner of the

private cars, as apparently that would be confiscation of prop-
2148 erty. But the facilities of the carrier should not be used for transporting that private car in excess of the facilities granted to the user of the system car. The Berwind-White interests have found it to their advantage at times to place their cars at other than their own mines, which was done at their own solicitation on their own request to get coal. Private cars ought to be made to stand idle if the mine that received private cars was getting more cars than other mines that did not get private cars, if by moving those private cars it took the facilities of the carrier. (1598)

By Mr. CARMALT:

"Commissioner AITCHISON. May I ask on whose behalf you are cross-examining?

"Mr. CARMALT. On behalf of private-car owners, if your honor please."

During the month of October there was a poor market at tidewater, due to the great movement of British coal. We were shipping coal to the West rapidly, but we were also shipping to the East at the same time. The rather larger than normal movement to the West did not contribute toward the congestions of the terminals and yards. (1599) There was a slightly larger movement than normal from the New River district operations into the West. There was an embargo part of the time on westbound movements. As to whether the coal from the Berwind-White mines to Hampton Roads was going to the public utilities along the Atlantic seaboard, specifically the Interborough Rapid Transit and the Brooklyn Rapid Transit in New York Harbor, I do not know just where that coal was moving, but at the same time other New River coal was moving to public utilities and to places just as important as the Interborough Rapid Transit Company. As to instances which I cited at Clifton Forge and Hinton where the first train that moved out was
2149 of Berwind-White cars, there were no system cars left in the Clifton Forge yard at that time that I know of. (1600) The average daily loading of Berwind cars was about 60 cars, and the average number of cars moving in runs pretty close to that, so that if they move that train of Berwind cars—they have rather large trains on the Chesapeake & Ohio—then there would not be anything but scattering cars left. The cars would arrive in late by reason of the fact that the Berwind cars were moved in preference. As to the movement of 200 cars to the Lakes on October 30 which I described, I checked out the first cars loaded as compared with the first cars which came back to Thurmond, and it was just two weeks in making the turn around. And I took a conservative figure. I hope it was not cars loaded after the first of November, or it would be a shorter turn around than even two weeks. It took two weeks over steam lines to the Lakes. (1601) You would consider that emergency loading at the Lakes. There was no delay by the shipper, but thousands of cars were lying on the Chesapeake & Ohio consigned to the

same points that were not moved at that time. As a matter of fact, I was informed last Friday that the Chesapeake & Ohio had 15,000 westbound loads on the railroad—and when I say on the railroad I mean at mines and awaiting delivery to their connections. The Berwind-White ownership is through the New River Pocahontas Company in that field, the total number of Berwind-White ownership there being 1,000.

(1603) NOVEMBER 23, 1922.

"Mr. BALLARD. I now file, at Mr. Bronson's request, copies of the questions the replies to which appear in Exhibits 33, 34, and 35."

(The paper referred to was offered and received in evidence as Exhibit No. 71.)

2150 (1604) ALLAN H. WILLETT, called as a witness, and being duly sworn, testified as follows:

Direct examination by Mr. BALLARD:

I am director of the bureau of coal economics of the National Coal Association, Washington. I have held that position about two years. Prior to that time I was in charge of the work in commercial engineering at Carnegie Institute of Technology at Pittsburgh. I have prepared a statement from data of the geological survey showing the annual production of bituminous coal by years in this country for a period from 1900 to 1921.

(The statement referred to was offered and received in evidence as Exhibit No. 72 (1605).)

I have prepared an exhibit showing the average yearly production of bituminous coal by five-year periods 1821 to 1920 from the figures of the geological survey.

(The statement referred to was offered and received in evidence as Exhibit No. 73.)

By Commissioner AITCHISON:

Exhibit 72 relates to calendar years. The 21 figure is called an estimate, though that is the final figure that is out in 1921 by the Geological Survey subject to further revision as occasion may arise. (1606)

I have prepared from the figures of the United States Geological Survey a statement showing production by States for 1920 with the estimated capacity based on the number of days worked.

2151 (1606) (The statement referred to was offered and received in evidence as Exhibit No. 74.)

As to the last column in Exhibit No. 74, the Geological Survey gives the production by States and the number of days worked by States. The figures in the last column were obtained by raising that production to the basis of 304 days in a year—that is, by dividing by the number of days worked and multiplying the quotient by 304. I have prepared a similar exhibit on the basis of the 1921 figures of the Geological Survey.

(The statement referred to was offered and received in evidence as Exhibit No. 75 (1607).)

The method employed in computing the last column in Exhibit 75 is exactly the same as in connection with Exhibit 74. I have prepared a statement entitled "Soft Coal Consumed in the United States and Exported in a Year of Active Business," being taken from an article in the "Coal Age" by F. G. Tryon and W. F. McKenney, of the United States Geological Survey.

(The statement referred to was offered and received in evidence as Exhibit No. 76.)

EUGENE MCAULIFFE, recalled as a witness, testified further as follows (1609):

By Mr. ROPIEQUET:

I appear at this hearing for the Union Colliery Company operating the Kathleen mine in Jackson County, Illinois; the Milwaukee Electric Railway & Light Company, operating electric power and street and interurban railway facilities at Milwaukeee and vicinity in the State of Wisconsin; the Wisconsin Gas Company, operating public gas facilities at Racine, Wis.; the Detroit Edison Company operating an electric public utility at Detroit, Michigan; the King Harlan Coal Company, located at Kildab, Harlan
2152 County, Kentucky, owned and operated by and for the Detroit Edison Company. (1610) The interests I represent have one mine in Jackson County, Illinois. I have a general acquaintance with the Illinois mining situation, having operated mines in Illinois in 1908 and 1909. My impressions and experiences relative to the assigned-car question cover not only my experience in the operation of mines, but my experience as a railroad operating and purchasing official. Referring to Mr. Markham's testimony, it has not been the result of my study and observation that the assigned car was a benefit to the railroad and to coal purchasers in increasing the coal supply and the carriers' earnings on the coal. I do not think the use of the assigned car is conducive to increased coal-traffic earnings for the reason that it has, uniformly, so far as I have been able to observe created local disturbances, unrest, and a lack of coordination and harmony between coal and railroad people. In fact, it has in substance proved a general disturbing proposition. As to whether the railroad-fuel assigned car delivered for foreign lines has a tendency to increase the production of the mines generally for a district, or to decrease it because of disturbances, I never felt that the billing of cars, sometimes on the ownership of the railroad and very frequently on general miscellaneous ownership, added to the car supply. (1612) On the other hand the concentration of cars, of whatever ownership and character under special conditions in any individual mines have resulted in general disturbance of the labor situation in the immediate vicinity. It has not been my observation that the limited number of assigned cars as compared with the total number of cars used in coal service during periods of heavy coal demand added at all to the de-

pendability of railway-fuel supply. I do not think that special equipment such as oil and poultry cars should be compared with coal cars, for the reason (1613) that special equipment is used in a limited service and by a limited number of people and is very
2153 largely employed in the tranportation of raw material—I refer particularly to the oil car which is the most numerous special type of car other than coal cars, perhaps—and is not subject to use and could not be used in general service. While in the case of coal cars of whatever type, of whatever ownership, they are interchangeable in the matter of moving different commodities. There is not to my knowledge a special type of railroad fuel car in existence to-day that cannot be put into a certain class of commercial trade as well as in the movement of other commodities. In discussing the situation of a mine whose output by the Illinois Central for a minimum period of not less than thirty days, it is very natural to take a very broad view of the prevailing characteristics of mine labor. Mine labor is of a migratory character. It is of an irresponsible character. And when I make that statement I feel that the coal industry and the way it has functioned is very largely responsible for those unfortunate characteristics. (1614) Men working in coal mines lack permanence of position very largely because they do not know what to-morrow will bring out. I am very sympathetic with coal miners in some of the problems they have to contend with. For example in our property after nearly five months of complete cessation of production and after the first ten days of resumption our men have obtained but a fraction over two days per week working time. Certainly under those circumstances nothing but restless labor can be expected. Men under the thirty-day rule will pick up and go. A large number of our men are single men, loose, having no property interests. They can move out of a house in an hour. And this situation is general and seems to be one that we are not able to correct under the conditions that obtain. If one mine in a vicinity were working for thirty days under a full-output fuel contract and its neighbor was working under a commercial contract, under a shortage, and the following month they were both working commercially, the one which
2154 had the thirty-day output in the previous month would have an advantage during the next month in working ability to produce. (1615) Any mine that works continuously or reasonably continuously for thirty days almost invariably increases its output by adding to its labor. It is not a question of men alone, but men to do certain things that might otherwise be neglected, postponed, and put off, with the result that in the following month the daily unit production would be materially higher than the mine that had not enjoyed the advantage of that start. Even if there is an oversupply of mine labor, the loss of men who are especially adapted for work still occurs under the conditions of a shortage mine as compared with a full-output mine, and beyond that I think we get this surplus labor situation somewhat confounded. I calculate roughly that we have 150,000 surplus mine employees in this country hanging on the

fringe of an overdeveloped industry, starving to death; and no operator is willing to close his individual (1616) property and release his men to some other property. Our situation as the result of the car supply we have suffered on the Illinois Central since the resumption of work in August, has been that one hundred loaders have left their working places and our daily production is down more than 20 per cent from what obtained prior to the suspension. I have no special knowledge of the condition surrounding the operation of the Madison Coal Corporation mines in recent months. My general understanding is that they have worked regularly, but I can not say positively. I think the situation in Illinois under periods of car shortage and short working time is more severe than it is in the mines south of the Ohio and Potomac Rivers, (1617) for the reason that under the rigid union regulations that we work under we lack that elasticity of working men on idle days which generally obtains south of the rivers. I can not conceive where in our property
2155 we could get a man to go in and load a single car of coal on an idle day, that is to say, when the whistle did not blow for work and the necessary day forces were not assembled, with this limited exception, that if we had some day men taking down coal for construction purposes, perhaps a pit car or two pit cars of coal might be loaded, but no coal can or will be loaded at the face of an Illinois mine on an idle day. (1622) The labor turnover in the average coal mine is excessive. In the case of our mine, in 1920 it was 152 per cent. (1623) The turnover obtains to a greater or less extent in all mines. The shifting character of the labor which results from habits which we are very largely responsible for keeps a certain movement up in the very best mines, regardless of whether they are working continuously or part time. The vice in the shifting is not confined to the number that shift, but under those circumstances the class of labor that is necessary for the most efficient operation of a mine is lost. We have a rather peculiar situation in the mines. Haulage is a very important factor. In other words, if the haulage force lags, the loading and output must lag, and the motormen are usually young, reckless fellows without families, and shifting around is an adventure with them. They answer nearly every cry, every suggestion made by friends, that something is a little bit better, a little bit faster, or a little bit different in some other place. When skilled machine runners, who must cut the coal and who are not overnumerous leave, even one or two, the result is disarrangement of your force and your production. (1624) Never in my experience in looking after one mine in Ohio, several in Illinois and Indiana and one in eastern Kentucky, and a number in western Kentucky, have I found a surplus of skilled motormen and machinemen. In a mule-haulage mine the driver occupies the same relation to production as the motorman does or a trip rider in a power-haulage mine. A good mule driver is a valuable asset
2156 to a mine. As to the necessity of assigned cars to avoid the evil of confiscation by carriers, I at one time purchased fuel

for 15,500 miles of railroad, and I never found it necessary to use assigned cars to avoid confiscation. My experience at that time covered the longest (1625) bituminous coal strike of a general character that ever obtained in the United States—1910—five months and ten days. I purchased fuel for the Chicago, Rock Island & Pacific, the C. & E. I., and the St. Louis & San Francisco and about ten lesser and allied lines. As to whether there is any reason for a special assigned-car privilege to carriers that would not also be necessary under similar conditions in the case of public utilities, I cannot see any distinction between the actual necessities of a railroad and an important public utility in that respect except those that would occur to the advantage of the railway. I think the responsibilities of a public utility extend far beyond the mere serving of power and maintaining its men in employment. They extend to matters of sanitation, policing, law and order, and other things of that character that cannot be overlooked or abandoned, even temporarily. (1626) My observation of the mining industry is that it has to furnish housing and sanitation and amusement and entertainment facilities of a defensible character in proportion to the earnings of the property. The trouble with a great many mines that lack proper accommodations for their help is that they have not in the past made sufficient money to furnish these things, and certainly full running time and a preferential car supply would contribute to the earnings in making that possible. For example, the conditions of the United States Steel Company at Lynch, eastern Kentucky, are equal to those that obtain in any mining camp in the world. They probably, with ample resources and a chance to make an adequate showing based on full running time, would have these things that mines that work 25 or 30 per cent for months at a time could not afford to furnish.

2157 The special privileges which are accorded these whole output mines in car supply (1627) and running time make it possible for them to do things for their men which it is impossible for an operator who suffers under the prejudicial distribution where there are not assigned cars. I would say that the use of the assigned car has decreased the cost of fuel purchased by the railroads, but, on the other hand, the cost to the general public that supports the railroads, that pays freight on 75 per cent of the bituminous coal moved, has been increased by the use of the assigned car. I think the result has run adversely to the general industrial life of the country and the individual. (1628) As I stated last July, I do not think the railroads of this country have had in the last 20 years that I have studied the situation and observed it closely a car shortage. I am speaking now about an insufficient number of cars. The trouble is that we attach too much importance to the so-called coal cars—which is not a coal car but a freight car built and operated for the movement of various commodities. The real trouble with the railroads has been the lack of other facilities, and no better evidence of that situation is required than a glance at the average miles per day that the freight

car makes in service. I think that the effort that is made generally to give preferential service to even a limited number of assigned cars reacts against the total movement, much as the craze for priorities that were put into effect during our early war experience slowed down the whole transportation movement of the country, and, in fact, very nearly strangled it. (1629) I have this thought with respect to railway storage piles. If a railway buys coal during off-time transportation seasons and moves it even part way toward the point of consumption, it should have this privilege to allocate any portion of its equipment of whatever character may be necessary to the movement of that coal from that stock pile to the point of consumption, and that without condition or reservation, assuming,
2158 of course, that intelligent operating methods are employed and cars are not wasted. That situation, in fact, has nothing to do with the distribution at mines. If the coal were distributed to these storage piles during the period of plentiful supply of cars at convenient spots and were then distributed, there would be a very much less haul on this coal for its users during the period of car shortage than if it were distributed during that period directly from the mine. (1630) I think that when the percentage of bad-order cars is very high cars can be set aside and used in stock piles and coal chute service, short movements, intrastate, switching movements, not put into long trains; that is, cars that would not otherwise be possible to put into line service. To what extent that condition would obtain I can not say. I spoke of having purchased coal for the fueling of 15,500 miles of railroad miles. I do not think there is anything in the general situation that would change conditions so as to make it impossible to carry out the same theory that I then had. On the other hand, out of some of the testimony that has been delivered here I have been very much impressed with the fact (1631) that the methods that were put into effect at that time and then successfully employed have been carried forward since that time. I have already testified to what those methods were. There are certain car-holding companies that lease at an established price special private equipment. I do not know of any company that has coal cars to lease on that basis. (1632) I want to speak particularly as to the requirements of the Detroit Edison Company, whom I did not represent at the July hearing.

By Commissioner AITCHISON:

I am an official of that company, which is located at Detroit, Michigan, and which burned or consumed in the generation of electric energy and in central steam heating for the year ending October 31, 1922, 1,018,679 tons of bituminous coal. That coal is
2159 of a special character. A limited portion of it was used for gas-making purposes and necessarily had to be of gas-making character. (1633) The major portion was high-grade steam coal. The Detroit Edison, because of its power-house limitations which were put in a good many years ago, and the very heavy load that

it has carried, has found it impossible to use lower-grade coals that are successfully used, for example, by the Cleveland Electric Illuminating Company, which is also a related property but which I shall not attempt to speak for specifically. The Detroit Edison Company burns substantially the same measure of coal that the Pere Marquette Railroad did. It is located in the same consuming territory, in the same latitude, and suffers all the vicissitudes of severe winter weather conditions that the Pere Marquette does. It enjoys no special privileges, it makes contracts, gets its coal when it can, and buys the rest of it when it can not. Its ability to get deliveries under its contract are very largely interfered with by the numerous special arrangements that have been made from time to time by railroads and those using the assigned car. That company has a storage capacity of 350,000 tons, and in the early part of 1922 it had 275,000 tons in storage. My personal efforts, directed to obtaining priority orders for the Detroit Edison Company in August last, were circumvented by the fact that they still had a remnant of storage, some 22 days. (1634) In other words, the Detroit Edison has in recent years been penalized because of the foresight and expense it has gone to in the matter of protecting itself against such contingencies as obtained this summer. The fuel and transportation resources available are given preferentially to those who do not do what the Detroit Edison did. That company owns the King Harlan Coal Company's mines at Kildab, Kentucky, which is located on the Harlan branch of the Louisville & Nashville Railroad. The entire output goes to the Detroit Edison. The mine has been a liabil-
2160 ity to the company since it was purchased. That situation is best expressed in the statement of running time given me by the assistant to the vice president, Mr. J. W. Parker, who states that the mine lost in August 72 per cent; in September 81 per cent; in October 79 per cent—that is, this year—because of lack of transportation. I want to present the Detroit Edison Company's situation as a concrete case of the ability of a public utility with grave responsibilities being able to take care of itself, not only without its special privileges but because of the fact that they are given to others to the disadvantage of the Detroit Edison.

By Commissioner ATTCHISON:

I regret to say that the Detroit Edison was not the beneficiary of service orders of this commission; that the service orders were issued, but because of the fact that we stated frankly that we still had 22 days' coal in the stock pile the coal committee working with Mr. Spencer denied priority orders. I think for a time we were in class 1, but the specific orders were withheld because it had 22 days' coal. I cannot say whether we were in class 2. The reason given by Mr. Spencer and the committee was that the available coal was distributed to the people whose necessities were greatest. (1638) I want to make clear my position regarding the assigned car and the

private car. I have some doubts as to the desirability of individu coal consumers or shippers owning cars. Many railroad people thin that the purchase and use of such cars adds to the general stock o equipment. I think that the men who purchase those cars expect spe cial privileges; otherwise they would not purchase them. The would not add to their supply. And if private cars are a good thin we have only to carry the situation to a complete conclusion an wonder what would happen if everybody furnished his cars. Cer tainly special privilege would disappear then, in so far as ownershi created it under that condition. In other words, I think tha
2161 the private car insiduously seeks and receives special prefer ential service, sometimes without (1639) the direction o knowledge or connivance of the executives of the railroads. I think further, that every disturbing element that is put into the coal situa tion adds to the abnormality of the prices charged for spot coa during certain periods. The fact that perhaps five per cent o assigned or private cars get into a community means justificatio for charging higher prices for the coal that the public under thes circumstances bids against each other for. In other words, thing of that sort are seized and used as a foundation for exorbitant price We have found it necessary because of the tremendous volume an weight and measure of coal traffic to make special rules of the ratin of mines and the distribution of coal cars. The two transportatio jobs are not comparable. With respect to the curve produced by th engineers' committee (1640) of the United States Fuel Administra tion on Exhibit No. 38, it was my privilege to know the three gentle men who made this exhibit, and Mr. Cyrus Garnsey is an accountan of very high order and a former railway comptroller and a man tha was thoroughly capable of analyzing figures. Mr. Norris and M Allport are both consulting engineers of high attainment. I dis cussed with them at different times the conditions surrounding thi situation and the information upon which they built this curve. think a great many of the erroneous impressions and deductions mad from same are due to the fact that in printing the curve in the repor of the United States Fuel Administrator the figures at the bottom o the plate have been transposed. (1641) Reduced to cents per ton as close a rating as I can make of this curve would indicate that o the basis of $2 cost of production with 100 per cent car supply an 25 per cent loss of time due to any cause, whether it is cars or any thing else, the result would be an increase of 32 cents per ton. A
50 per cent loss of time from any cause would result i
2162 an increase of 78 cents per ton. The highest figure show on that curve, I think, suggests an 84 per cent los or 156 per cent increase in cost, which, on the basis of $2 pe ton as the cost, with full running time, would increase the co $3.32. I checked that curve against my personal experience in th operation of our Kathleen mine, where we did not have the distorte variation in cost shown by Mr. Tucker's exhibit as between month

having a material account, and I found up to 50 to 55 per cent lost time, running very close to our actual experience. The curve represents a study made from the production of (1642) over 7,000,000 tons of coal and 73 distinct operations, some of which worked at certain periods and others at certain other periods. I think, further, an injustice is done the commission by an attempt to show that this curve sets out losses that obtained from car shortage, when the fact is that it shows losses that were obtained from lost time from whatever cause, not necessarily cars. As to the statement just referred to me of permits issued by the service agent of the commission in the Louisville district for priorities, class 1, addressed to the Louisville & Nashville Railroad and running in favor of the Detroit Edison Company of Detroit, Michigan, for the period from August 30 to September 11 alone (1643) and running from four cars to 100 cars apiece, when I left Washington on August 18 I gave up the job. As to Permit No. 333 issued August 1st to the King Harlan Company for 24 cars per day, in the month of August that mine worked 18 per cent of time and lost 72 per cent.

By Mr. BRONSON:

I cannot say what the rating was, but its production was, until the men disappeared, about 16 cars a day. It is very apparent that the permits were issued. (1644) This is all subsequent to the 12-day period I labored on the situation in Washington, when the permits were denied.

2163 By Commissioner AITCHISON (1645):

I will not dispute that the Detroit Edison Company had the benefit of priority orders of the commission. It is entirely possible that without those priority orders they could not have operated. I will even say that that is the case.

By Mr. BRONSON:

In objecting to assigned cars I was speaking of both private and railway fuel cars. (1646) There is an extraordinarily large overproduction in the Illinois fields. I do not think that the trouble is caused more by over-production than by assigned cars. The assigned car has very materially contributed to the over-development. (1647) The over-development of the coal mines in this country wastes cars, locomotives, and general transportation facilities to a serious extent.

2164 (1648) I think that if the cars available were put into a fewer number of mines in the Illinois field the mines working would get better running time and the results would accrue to the benefit of the railroads and of the public. In that connection the Madison Coal Corporation is not without offense in that respect, having just completed the opening of a mine. It is used by the Illinois Central for railway fuel purposes, and that adds to the over-development in the State of Illinois. As to whether I would regard it as over-development for the Illinois Central to develop this Madison Coal Corporation to a point where they could supply the entire needs of

the Illinois Central, I have always questioned the wisdom of a railroad attempting to operate coal properties. As to the percentage of over-development in the Illinois field, considering the last year or two, I could not say specifically (1649), perhaps thirty or forty per cent. That is a mere guess. I have never made a calculation on that. I am unwilling to state that that thirty or forty per cent causes more trouble with respect to car shortages or car distribution than the use of assigned cars either for private or railway fuel. I to say that the over-development of mines in the state of Illinois has wasted transportation facilities, that it has increased the cost of coal to both the railroads and the public, and that the assigned car has been a contributing factor in bringing about that development. As to whether the assigned car is the greater or lesser contributing factor I would not attempt to say. If a railroad had a legally sufficient car supply and in addition thereto purchased cars sufficient to take care of its coal-car needs from a coal-car distribution stand-
p'int, I could not make a specific objection to a railroad get-
2165 ting its fuel in any way it wanted to, if it took care of the requirements of the commercial demand (1650)

By Commissioner AITCHISON:

I appraciate that taking care of the commercial demand with a legally sufficient car supply may mean that at times it would not be sufficient to meet all demands.

By Mr. BRONSON:

(1651) As to whether the effect would be the same, so far as the mining industry is concerned, of the railroad taking its coal on engine tenders at the tipple rather than on cars, I am not in sympathy with some of the answers made in reply to that question. If a railroad finds it economical to buy coal from a mine without the intervention of cars, I say it should do so and the mining industry should not be given a voice in that matter. It is not the duty of railroad companies to equalize conditions as between mines. What a railroad company should do is to attempt to prevent, through its own initiative, distortions. I do not think that practice would result in the same wastage as the assigned car rule. (1652) In the past I made contracts with mines that loaded directly to engines, and it was my observation that the tonnage was very negligble. I have forgotten the figures, but the total tonnage purchased by the United States in that way is not extraordinary. Delivery is made usually on extensions. We seldom find deliveries made on the main line, and then the majority of the trains are not stopped to coal. However that situation might disturb the mine labor situation, I do not think the railroads should be expected to eliminate it for that reason. I stated that in 1910 I purchased coal for about thirteen separate corporate entities. I was the general fuel agent for those railroads. We always confiscated an occasional car of coal.
2166 There was transposition of numbers and mistakes made in yards, but wholesale confiscation of cars were never tolerated.

I would not favor confiscation generally, with this qualification (1653), that in an emergency for two or three days we might perhaps take the major number of cars in a certain district and load them with fuel coal, but we always balance that situation immediately thereafter. I grant a railroad official any license in an emergency. I believe that a railroad company could contract its coal for fuel purposes and get it without assigned cars. I heard Mr. Davin testify that the Chesapeake & Ohio tried that in 1920 and could not do it. Mr. Davin's experience in 1920 was quite well borne out by my own experience, but that was an abnormal situation. It was due to a pernicious desire to make extraordinary profits that came out of the war situation when we were all acting, perhaps, somewhat abnormally. (1654) As to purchases of engine tender coal, the Baltimore & Ohio I think was the outstanding exception to the rule that carriers buy only a small amount of such coal. I think perhaps they purchased more coal direct from mine to tender than any line in the country. I have no objection to the Baltimore & Ohio purchasing company coal even if it runs to 15 per cent or more of its requirements. The Illinois mines use electric power largely. The measure of the electric energy consumed by Illinois coal mines is growing rather rapidly. (1655) These power plants operate by steam, as far as I know. As to where they get their coal I am only familiar with one central station selling much mine power. That is the Central Illinois Public Service Company, with a plant located at or near Harrisburg, Illinois. It gets its coal in the immediate vicinity. I do not think during a period of car shortage that plant had a right to assigned cars. It got along in the periods of car shortage without assigned cars.

2167 By Mr. CARMALT:

(1656) As to distinguishing between a private coal car and tank and poultry cars, the latter represent a class of car that the general shipping public does not seek. For example, a tank car is a tank car, but the major number of tank cars are used for the movement of a specific commodity. Ordinarily it can not be used in any other service than for the particular shipper and the particular character of commodity that he furnishes. The particular distinction between the private coal car and the other private car lies in the fact that a limited number of people have necessities which require tank cars or poultry cars, while all the public require the service of coal cars. (1657) That is the principal distinction. As to other distinctions, there are the physical characteristics of the car which unfit it for miscellaneous service. If a gasoline car is put into crude-oil or fuel-oil service it has to be cleaned to a considerable extent before it can be put back into the gasoline service. There are a great many shippers of gasoline, and it could be used in that service exclusively as long as it was fit to be engaged in transportation. That is not true of most cars. Take acid cars, castor-oil cars, and other cars for the transportation of such things.

I am not familiar with poultry cars. In fact, I do not think I ever saw very many of them. (1658) There is nothing inherent in the car that I know of that confines its use to a particular shipper if he has a commodity to ship in it. As to refrigerator cars, I think there is a distinction because there are so many types of cars and ventilating and icing facilities, and the fact that once employed in a certain service they are unfit for other service puts them apart from poultry cars. Meat cars, for example, I think must be substantially confined to the meat trade. Banana cars can be
2168 used for merchandise service. I do not think you would care to put dressed meat in them. As to the migratory character of mine labor, they do not change character when they go to work in an assigned-car mine. I expect that their character is modified if at all, rather slowly. The labor turnover is very much less in the assigned-car mine than in the commercial mine. To the extent that it is less it tends (1659) to stabilize the individual, but the reaction on the whole mass, I think, is great and the general effect worse. That is, it more than offsets the stabilization of individuals in the mine. (1661) As to housing conditions at the mine operated by the United States Steel Company in Kentucky, it has been my observation, so far as concerns living conditions, amusements, and things of the kind which attract labor or should attract it around a coal mine, that they bear a decided relation to the prosperity of that mine and that anything which disturbs that prosperity will react upon the surrounding conditions. I would not say that the housing and living conditions had more of a tendency than the assigned car to develop the migratory characteristics of the miner. I think that those are different questions. The assigned car is not responsible for all of the evils which exist in the mining industry but I hold (1662) that it contributes greatly to those which exist and to the continuation of the same.

By Mr. BRONSON:

As to whether during that period in 1910 when I purchased coal for those railroads there were any extended periods of car shortage in the twenty years that I have had to do with the purchase of coal and operation of mines I have never seen a year that did not have a so-called car shortage. As to that particular period of 1910, it
2169 might have been possible that there were no extended car shortage periods in the seventeen States that these railroads serve. The misapplication of "Increase in total cost of production due to decrease in car supply" instead of "Increase in total cost of production due to loss in working time for any cause whatever" in Exhibit No. 38 is not chargeable to the engineers who made the curve. The text of their statement contained in Exhibit No. 39 is explicit and it refers to short time, lost time in coal mining; and lost time is lost time, by whatever it is caused. The caption should read "Increase in total cost of production due to loss of time for any cause whatever." (1663)

Commissioner AITCHISON. For the sake of the record I will say that a recent compilation indicates that class 1 priorities issued in favor of the Detroit Edison Company in the Louisville district during the period named aggregate 926 cars.

The WITNESS. Do you know, Mr. Commissioner, how much coal they got on those?

Commissioner AITCHISON. I do not know how much they got, all told. I can tell you how much they got up to the end of that time.

The WITNESS. On the basis of fifty tons to a car, that would be 48,300 tons, or about two weeks' supply.

Commissioner AITCHISON. Of course, on these permits issued during this period not all of them were expected to be completed during that period.

The WITNESS. No. I do not want to be placed in the position, Mr. Commissioner, of criticizing the commission or any of the machinery that was instituted for the salvation of a situation which was very desperate. It was all constructive and helpful. (1664) I merely tried to make clear that that company exercising extraordinary foresight and making heavy expenditures was, because of the fact that railroads and others did not employ the same oversight and make the same expenditure, paralyzed.

2170 Examiner BARTEL. It should also be stated that these permits to which Mr. Commissioner Aitchison referred were issued by the Federal Fuel Administration.

The WITNESS. Mr. Spencer?

Examiner BARTEL. Yes.

The WITNESS. He acted the best he could under the circumstances.

Commissioner AITCHISON. Everyone of them had the written approval of his representative.

By Mr. LIVERIGHT:

The labor turnover of 152 per cent which I referred to at my mine was during the calendar year 1920. I would say I attribute two-thirds of that roughly to shortage of car supply. (1665) As to loss of labor, for example, in the month of May, when we lost for lack of car service 61.61 per cent of our running time, the number of men who left increased very materially. In other words, the number of men that move out bears a pretty close relation to the time lost.

Commissioner AITCHISON. I have that compilation now. During the period in which these permits were being issued, out of 926 cars 388 were shipped as reported.

The WITNESS. On a basis of fifty tons, that would be 16,900 tons of coal.

Q. (By Commissioner AITCHISON.) This is from one field?

A. Yes, sir. Roughly, about 37 per cent of your priorities were shipped.

Q. No: shipped during the period. You would not expect, if we issued a priority order on Monday, that that coal would be shipped

on Monday. I simply gave you one which happened to be covered by this period, and during that period there were 926 cars placed in class 1 and during that period, of those particular ones—and not of any that happened to have been issued before—there were 338 cars shipped. (1666)

2171 A. Let us concede that the whole 926 were shipped; that is, 48,300 tons.

Q. From this one field?

A. Yes, sir.

By Mr. BRONSON:

We were trying to secure coal on the West Virginia division of the Chesapeake & Ohio. It was substantially at a standstill at that time.

By Mr. CURRY:

(1667) I said that at one time I purchased coal for about 15,000 miles of railroad; the Chicago, Rock Island and Pacific, the Chicago and Eastern Illinois, and the St. Louis & San Francisco were the major railroads, with a number of subsidiaries, including the E. & I. My purchases for the Rock Island were restricted to the years 1908 and 1909 and part of 1910. I used to be "sold" back and forth by the Yoakum interests at that time. I continued to purchase for the C. & E. I., Indianapolis & Terre Haute, and E. & I. for two or three years longer. Thereafter my activities were confined to the Frisco and its interests until the 15th of January, 1915. I purchased the coal on a uniform contract, prepared by me and approved by the general solicitors of the combined lines, which called for a certain daily delivery with 100 per cent spread between the minimum and the maximum, that spread to be exercised at the election of the railroad. There was no provision in the contract that the fuel coal for the railroad would be given preference. I would say I was able to secure coal under those contracts not without trouble. During periods of car shortage I employed myself rather actively in the matter of trying to improve the car service in the coal fields and gave special attention to that. We had very severe periods of car

2172 shortage during this period from 1908 to 1917. At one time I recall I was severely reprimanded for taking 116 Burlington box cars and loading them with coal for fuel use. The lines which I represented furnished much coal to foreign lines in the Alabama field. We furnished coal to the Seaboard Air Line, the Southern Railway, and the Central of Georgia during a portion of that period. In Kansas we furnished coal to the Chicago & Great Western, the Union Pacific, and perhaps other roads that I do not now recall and to numerous Texas roads. (1669) Foreign assigned cars were not used for that fuel coal. We did not know what an assigned car was then. We hammered connections for delivery of equipment, and that was as far as our knowledge of activities went in those days. As to whether the railroads I represent and which did not use assigned cars during that period were able to secure their fuel-coal

weeks, my boast is that the railroads in that period never waited for fuel. In the light of recent experience with the Detroit Edison Company and the class 1 priority for 926 cars in order to get a part of its fuel supply, I think that under the conditions that existed recently carriers without the use of assigned cars could secure an adequate, suitable, and regular supply of coal at a reasonable price. The attitude maintained by the coal operators towards the railroad people, and vice versa, is accentuating a condition that has been very bad for the past two or three years and which may become equally bad at some time in the future, to the resultant disadvantage of the public as well as the railroads. (1670) My statement would not apply if the production dropped as low as 5,000,000 tons a week and was confined to particular localities. If the Illinois Central had contracts in Illinois and Illinois was shut down as tight as it was this summer, some special means would have to be devised to take care of immediate necessities.

By Mr. CURRY:

2173 As to taking care of a railroad's demands in a thirty per cent car-supply period without over-purchasing coal, I do not think that a thirty per cent car supply, generally speaking, has obtained for very long at a time. At times individual mines and groups of mines get less than thirty per cent, unfortunately. Others get more. What I would like to see done is some attempt made to eliminate the conditions which are bringing these things about rather than try to patch them up continually.

By Commissioner AITCHISON:

(1671) As to how the Pere Marquette could get along if a big industry like the Detroit Edison is unable to get coal during a period of car shortage, I would not expect them to do so. I would say that we had more than an ordinary emergency on our hands. I would say that we had a great national emergency on our hands and that any legislation enacted for that situation that was necessary should be put into effect and carried out.

By Mr. BROSSEAU:

I would not say that the railroads and public utilities must have their equivalent of a full-car supply during the year. But during periods such as obtained I think they should receive special consideration. In this connection, however, I have never heard a railroad man say yet that his extraordinary emergency requirements should be confined to the movement of essentials. He invariable wants the full 100 per cent. He wants the privilege of moving non-essentials—to move all the business that is offered.

By Commissioner AITCHISON:

(1672) As to embargoes maintained by carriers in the east making restrictions even more strict than the list of essentials prescribed by the commission, I never saw a very long time without embargoes.

We have them with us always, seemingly.

2174 By Commissioner Aitchison (1672):

I know that during the extreme fuel situation this summer as to such steel plants, for example, as were compelled to restrict their output, the restrictions suffered were brought about by their failure to get sufficient fuel to operate rather than to move the product away from them. It is a matter of common knowledge that the commission has been obliged to hold conferences with carriers to get them to move perishables. I do not know how far carriers have insisted on moving nonessentials, but the fact remains that they have moved a large amount of nonessentials during these car-shortage periods. A large amount of coal which is produced is for non-essential purposes, too (1673); it is very hard to draw the line in matters of that sort.

By Mr. Curry:

I would not like to say that the railroads use the assigned car as a club to force the operators to sell their coal at a low price. We sometimes acquire impressions through experience or example that we believe to be proper and right. I do know and have specific information of the railroads using the assigned car to pay in part for the fuel that they required for their use. For example, I operated the Mary Jeane mine of the Wayne Mining Company during the year 1920. That mine is served by the Pennsylvania. It is about three miles north of Cambridge, Ohio. It is a very small mine. My local superintendent, Mr. Fillmore, became absolutely desperate for enough cars to keep even a few men there and keep the thing alive. We used to go to the superintendent of the Pennsylvania Railroad (1674) and get a day's run at the Pennsylvania price, which was then about 50 per cent of the market. Later on I was offered by the Valley Camp Coal Company, which was purchasing coal
2175 for the Pennsylvania the privilege of operating that mine full time if I would accept a price which was very much below our actual cost of production, which cost had been increased materially by the labor situation flowing from short running time. In the case of the Illinois Central Railroad in 1920, the operators in our neighborhood in Jackson County, Illinois, were given a day's run at times at the company price with a full car supply, and such cars were not counted against the percentage of distribution there. I discussed the matter in a friendly way with the Illinois Central people, and they discontinued the practice of not charging the cars and agreed to comply with the rule. We only loaded, I think, about two days. By "comply with the rule" I mean requiring them to charge cars so placed against the mine allotment. I could not say whether that was after Service Order 18. (1675).

By Mr. Bronson:

As to the practice of carriers in buying coal at a good price with the incentive of the assigned car held out, this practice only ap-

years (1678) during periods of extreme car shortage and fuel hysteria, and the results are of course far-reaching under those circumstances. I do not say that that is the common practice of all railroads, but I think it is quite a general practice during periods of stress.

By Mr. CURRY:

I have not in mind any specific instances of that practice during this present car-shortage period. As to private cars I have not any instances or any specific information to the effect that they absorbed the motive power available and in that way excluded the other commercial shippers from the pro rata share that they should have
2176 of this motive power; that is, not such instances or specific information as those testified to by Mr. Higgins, for example. But the fact of certain mines getting a full car supply every morning, with perhaps some lying over in the early days of the week with prompt movement of those loads each night, other mines competing with them and working under the same labor and other conditions getting two days a week, would in my opinion (1677) suggest the absolute necessity for preferential service both on the light and the loaded movement of the car.

Redirect examination (1678) by Mr. ROPIEQUET:

I would say that where there is a comparatively small amount of railroad assigned car transportation which has a hundred per cent facility use, while the remainder of the transportation in times of car shortage is not sufficient to move all the equipment to commercial mines, that presents discrimination in the use of equipment. Too many of us look at this transportation situation from too narrow a viewpoint. A coal car is absolutely useless in and of itself. It requires so many other things to move it and make it useful to either itself or the operator that the standards that we measure the situation by, the number of cars in the field, and so forth, are entirely erroneous and insufficient. I could not say what the percentage of overdevelopment of the Illinois mines would be as compared with that in the West Virginia field. I think there is a general overdevelopment of the coal industry throughout the country. I think that during the extended suspension of this summer in the union field most extraordinary expansion took place (1679) south of the river
in the fields that were working. That was not always necessarily
2177 confined to a certain number of mines, but the improvement of the output by the addition of machines improved loading, and so forth. I think West Virginia and Kentucky have developed perhaps faster in recent years than any other coal-producing districts. I think the growth of railroad controlled mines has perhaps exceeded that of privately controlled mines in the State of Illinois. For example, the Burlington went into the coal-mining business in southern Illinois for the first time in the last three or four years, and the Chicago & Great Western and the Soo Line. (1680) With reference to

the relative development of the coal-carrying equipment and facilities during late years compared with the development of the requirements of coal, I can only accept the statement of railway executives that it has not kept pace. I believe that to be true. In reference to the development of mine towns by the Madison Coal Corporation and the steel company, undoubtedly where there are assigned cars or daily output mines the companies can afford a larger capital expense in these investments than where they run spasmodically under the other basis.

Recross-examination by Mr. BROWN:

There has never been a time in my experience when there has been combined car shortage with motive power shortage to the extent that exists right now. (1681) I think that during my experience, covering the period when I was in the railroad service and since I left the railway service, I never heard of as high a percentage of locomotives in bad-order condition as at the present time. I think it is now about 29.5 per cent of the total. I think the assigned car as well as the private car is an evil under any conditions. I think it tends to accentuate bad conditions and to create bad conditions when things are running rather normally.

By Mr. BRONSON:

2178 By "bad conditions" I mean mining conditions and transportation conditions.

By Mr. ROPIEQUET:

In 1910 the greater part of Illinois was shut down for about five months and sixteen days under a strike.

THOMAS K. MAHER, called as a witness and being duly sworn, testified as follows (1683):

Direct examination by Mr. CARMALT:

I am president of the Maher Colleries Company and vice president of the Rosemary Coal Company, both properties located in Pittsburgh No. 8 district, eastern Ohio. My company is a member of the National Coal Association, and at the present time the Maher Colleries Company is operating five mines and the Rosemary three, all located within the territory I have described. (1684) Two of these mines are served by the Baltimore & Ohio and the Wheeling & Lake Erie and the rest are served by the Baltimore & Ohio exclusively. The aggregate ratings of the mines are 133.3, Maher colleries, and 40 cars for the Rosemary. We employ in the neighborhood of a thousand men at the Maher colleries, possibly three hundred fifty at the Rosemary. All of the Maher colleries are within six miles of each other. The Rosemary mines are about 28 miles further north or west and are located close together. We have railroad fuel contracts with (1685) the Baltimore & Ohio, the Nickel Plate, the Delaware, Lackawanna & Western, and the Michigan Central. We have full output contracts, one with the Baltimore & Ohio

and one with the Nickel Plate and one with the Michigan Central. The others are partial output contracts. There are three mines working on the fuel coal contracts and are working on assigned cars. The Delaware, Lackawanna & Western partial output
2179 contract is for ten cars daily, no provision being made for furnishing them. They are not handled on the assigned car basis this year. They were last year. I am endeavoring to get an arrangement made for them to be handled on the assigned car basis this year. (1686) I prefer to have them that way, but on account of the long strike the Lackawanna may keep their cars on their own road for anthracite. The reason we are anxious for assigned cars is that we have not been able to give them more than five daily, although the order calls and our contract calls for ten cars daily. We have been unable to give them five cars a day because of the car shortage in our region. That is not a preferential contract such as has been discussed here.

By Examiner BARTEL:

Outside of the fuel mines, those five cars are merely their proportion of the contract we have. We have been running in the neighborhood of 50 per cent on car supply, that is, our other mines that are not on railroad fuel. (1687) The five cars we supply comes from any one of the other mines. It is not assigned. That order takes its place among our other contracts. By reason of other contract obligations we are only able to give the Delaware, Lackawanna & Western five cars a day.

By Mr. CARMALT:

We sell our commercial coal in the general markets in competition with the gentlemen who have preceded me on the stand. Very frequently we have public utility companies as our commercial customers. (1688) I do not recall that we have any contract now with public utilities. The railroads bought coal from us on a day-to-day basis during the spring and summer of 1920. There was a considerable amount of confiscation of coal during that summer. As to the effect that had on the coal market of our commercial mines, it was very annoying to our company. We had three mines
2180 equipped to prepare a fancy domestic coal. The B. & O. Railroad apparently did not have enough fuel to keep them going currently and they resorted to confiscation. In doing that they frequently got hold of our fancy domestic coals that we have for school-house purposes and for general domestic trade and for which we get more money. As an illustration, we lost forty cars of this domestic coal, confiscated by the Baltimore & Ohio Railroad. It was five or six days afterwards that we were notified of the confiscation. We had to notify all of our customers (1689) that this coal had been shipped, and then it was necessary for us to write them all again that the coal had been confiscated—a great deal of trouble and also very annoying to our customers. At that time we did not

have any contract with the Baltimore & Ohio Railroad. We collected from them the full market price of the coal that was confiscated. I do not recall how long the confiscation of coal lasted that year, but I think for two or three months, anyhow. We were annoyed in winding up our lake program, and then when we commenced on our domestic coal we were annoyed by it. The market broke about the middle of December, 1920.

By Commissioner AITCHISON:

This confiscation was in the summer and fall of 1920.

By Mr. CARMALT (1690):

The commercial market was very bad, very soft after the middle of December, 1920, and all of 1921. That continued until people began to fear that there would be a strike the first of April. We were not very busy in our section until March of this present year. Beginning August 15, when the strike was settled, the condition of car supply was all right. The full run of cars to commercial mines in our territory lasted about two weeks. Since that time we have been receiving cars on our contracts on the assigned car basis
2181 at our fuel contract mines. Our mines that were not furnishing fuel coal were suffering from the same conditions of short car supply all through 1920 and since August 15, 1922, as were the mines of those operators who have been testifying here.

By Examiner BARTEL:

As to whether we got assigned cars during the life of Service Order 23, from the 25th of July up until September 20, (1691) we resumed work on the 16th of August in our section. We are a union district. The car supply was very good for the first couple of weeks after the first of September. I think from the first to the twentieth of September we had cars to take care of our contracts. I do not remember what day we signed the contract with the Baltimore & Ohio Railroad.

By Mr. CARMALT (1692):

All three of the present full output contracts run until the 31st of March, 1923. As to the lowest percentage of car allotment that we have figured on in making our contracts, we never sell more than from 50 to 60 per cent of our output on contract; that is, we have not for a number of years. We have found that to be a safe practice. (1693) Whenever the shortage has developed a percentage of less than 50 per cent it has been only for very short periods. (1693) As to the percentage that is being given to us now, on the Wheeling & Lake Erie it is about 22 to 23 per cent. On the Baltimore & Ohio it is probably 33 to 35 per cent. I do not attribute the car shortage of the current season altogether to the shortage of cars As to the elements that I consider have contributed mostly to that shortage, the shopmen's strike crippled the railroads terribly in our section, and the drought in the section of the coun-

try that Wheeling & Lake Erie Railroad travels has been a
2182 contributing factor. The president of the Wheeling & Lake Erie tells me that if they could get two or three weeks of rain, so that they could get a good water supply, their power would be very much improved. (1694) The car supply in March of this year was practically a full car supply. I do not know from the Geological Survey reports what the output has been in October relatively to March. I know what October was. The figures coming out from Washington every month are surprising to us all. There is a very poor car supply, but still there is showing up in the neighborhood of eleven million tons of production of bituminous coal. It must be that the explanation is that the cars that are available are distributed to a lot of additional mines, new mines. Coal can be produced cheaper on full running time than on short time. (1695) As to why we do not solicit more railroad fuel contracts, we have a general coal business and we try to balance our customers and to operate it as much as possible, so that all would not be stopped at the same time. For instance, we would like to have some steel company trade, railroad trade, and in the summer we have a very large lake trade. The selling price from the assigned car mines is always on a contract. That remains constant. The selling price of the coal rises faster at commercial mines than the cost of production when working on short time. Our general experience determines in a given year whether or not we will seek a railroad fuel contract. We get our people together and try to figure out what the new year is going to bring forth, (1696) what kind of business it will be, and what kind of business we will seek. We always like to have some railroad business and have had it practically ever since I have been in business. It furnishes a back-log. It gives us steady operation for one mine or more. It is an advantage from my standpoint to do business with the men that own the railroad that I am
2183 working on. I like to establish the proper kind of relations, and sometimes we hope to be on the best terms possible with the railroad customers, the same as we do with everybody else. There are some floaters in the coal industry; not more than in some other industry, though. As a general thing they stay where there is good work. (1697) It is not true in our section that a very large proportion of the mine labor is migratory. We have a mine town near the mines. That labor that rents the houses ordinarily does not move about a great deal. As to maintaining a labor supply in our commercial mines, we have been in that section for about twenty-two years, and in that twenty-two years I had a Grand Trunk contract for eight years. They always furnish their cars, and when I lost out—when the Grand Trunk Railroad purchased the property which immediately joins us—the cars went to that property. They were working on an assigned-car basis. I had the Grand Trunk cars for a period of over eight years (1698) and lost them all at once. I got out and got other business and did not notice the men changing

around much. We have men down there that have been there for twenty years living in the same houses. There has not been any great drift of miners from our mines to the Grand Trunk mines. Our operating people have never complained about it, at least. In years when we have had a fifty or sixty per cent car supply at our commercial mines, labor there has never complained because of the full-time work in the assigned-car mines. (1699) I do not think preferential contracts would be a practicable way for the railroads to supply themselves with fuel in our territory. I would not make contracts for railroad fuel on that basis. It would interfere too much with my general business. I have to have a lot of tonnage available for business that I took the last twenty years in building up, and I have to make some definite commitments to these people.

If I had to abide by a contract to give the railroad the first
2184 eight or ten cars out of the mine I might only get eight or ten and they would get it all. It would not fit in with our business. It might suit some other parts of the country. I do not know of any practicable way in which a railroad that has no coal on its own line can supply itself with fuel other than on the assigned-car basis in times of car shortage. I have contracts for off-line fuel for other railroads. (1700) The Nickel Plate has not a single coal mine on its line. They are obliged to buy all of their fuel off their own line, and in my judgment that would be in an awful bad shape if they did not assign cars for their own use. The Canadian Pacific send a great many cars into the Cambridge district, which immediately joins us on the west. The Grand Trunk send in for their necessary supply 42,000 cars. I consider that that number of cars sent into the field has added to the car supply in the United States.

By Examiner BARTEL:

I mean they got 42,000 carloads of coal out of the United States in their own cars. (1701)

By Mr. CARMALT:

As to the turn around of those 42,000 cars, it takes twenty-seven days. As to the effect of the car supply in that region for commercial distribution, of assigning cars for railroad fuel, I have always felt that it helped us—the assigned-car business helped in our section. The Grand Trunk property is a very large one and nicely equipped. They load probably a hundred and fifty cars a day, and if they were not getting Grand Trunk cars I feel they would have to have a proportion of the cars that are left for the rest of them for general distribution. They do not load commercially, that is, they do not meet us in a competitive way, and for that reason I feel that they are a benefit to us in our section. (1702) As to whether if the

Baltimore & Ohio should scatter its contracts through that
2185 field to all the mines on its railroad there would be just as good a car supply as there is now, the operating official of the Baltimore & Ohio Railroad claims they would not. He is an expert

in his line. I believe that the economy of the transportation by means of the assigned-car basis tends to increase the supply to the commercial mines by preventing a wastage of the cars and of transportation. I do not consider it a practicable and economical method for a railroad to stock coal in piles in times of great plenty for use in times of car shortage. I have not had any experience from the railroad side of handling fuel.

By Examiner BARTEL (1703):

As to why that would not be economical, the coal is stored where the Lord put it, in the best place it can be, and it is bulky and takes a tremendous lot of space to attempt to store it. It is stored by utility companies where they can use it, right in the front of the boilers, and large piles are put there. But for a railroad to undertake it I do not think it is economical, and I do not think it ought to be required. I used to be in the railroad business, but never had anything to do with the purchasing of coal. But that is my observation of it.

By Mr. CARMALT:

As to the practicability of public utilities stocking coal without the use of the assigned car, all at least that I am familiar with stock a certain amount, but I think almost every year within the last five years they have come to Washington to ask for a priority to get their fuel supply. They were disimilar from the railroads in that they stock their coal, such as they did stock, at the point of use. There is no wastage in that situation and nothing uneconomical
2186 about kind of handling. (1704) If the railroad stocks its coal it must move it from the stock pile. The railroad contracts specify a particular quality or production of coal. From the point of view of quality I would not consider it practicable for the railroad to distribute its orders throughout the region. In our region there are two grades—nut and slack and inch and a quarter lump coal. You have to have a tipple properly equipped to prepare coal of that kind. Not all of the mines in the region are properly equipped to accept contracts for prepared coal of the quality the railroads desire. Lots of them just have mine run. And our region is rather unique in having a single uniform quality of coal.

By Mr. BRONSON (1705):

Our three fuel coal mines work a greater number of days per week during car shortage periods than our five commercial mines. The individual miners working in our fuel mines work more days per week than the individual miner working in our commercial mines during the same period. As to how much more he works, the individual miner is like almost every other individual. If he has an opportunity to work every day the vast majority of them will do it. They will, contrary to some testimony that I have heard here. My experience is that they are glad of the opportunity to have regular work.

As to why the men working at our commercial mines do not seek work at our railway fuel mines, they are several miles apart and they do not want to leave their homes. After the railroad fuel mine is filled up there is no chance for anyone else to come in there. As to preferential contracts I do not think that our buyers would be willing to buy on such character of contract.

2187 Cross-examination by Mr. BALLARD:

(1706) In speaking of the number of mines in our district that are equipped to prepare railroad fuel I had reference to Pittsburg No. 8, in eastern Ohio. I have no idea how many mines are now so equipped there, and could not tell you how many mines are there in the district. The cost to equip a mine to do that depends on what kind of equipment you put in. Shaker-screen equipment might cost you $30,000. An ordinary bar possibly one-third that amount. That would apply to a mine of a thousand tons. The distinction I make between the storage of coal by public utility and by railroad is (1707) that the public utility stores at the point of use. Coal that railroads use in a permanent boiler is in one place. That ought to be stored, a certain amount of it. Railroad fuel that we sell is used all over the railroad on locomotives. Other than the expense I do not see any objection to storing railroad fuel at points where it is put on the locomotives. The public utility uses it; throws the coal directly into its boiler. The railroad has no way of doing that. The situation of the railroad and the public utility are not parallel, if you store railroad coal at the points where it is put on the tender (1708) just as you store public utility coal at the point where it is used at the public utility plant. The locomotive has to be loaded at a regular coaling station, and then it uses the coal all over the 100 or 200 miles of that division.

By Examiner BARTELL:

If I were operating the railroad I would object to its storing coal at its coaling stations, if I was on a road that originated coal the way the Baltimore & Ohio, the Pennsylvania, the Wheeling and Lake Erie, and others do. I would expect to get my coal currently. I would try to, and would if it was possible.

2188 By Mr. BALLARD:

I do not know that there is any distinction between a public utility and the railroad in that respect. (1709) The reason I gave for my opinion that the assigned car increases the commercial car distribution is that assignment of cars prevents wastage of transportation. I base that opinion very largely on Mr. Galloway's testimony here, and having had a number of conversations with him and other railroad men. I was a railroad man myself at one time and had to do with dispatching cars and engines. I certainly would not want to take my fuel from twenty or thirty coal mines along the line if I could get it from two or three. The extra amount of shifting is tremendous, and the expense is tremendous. The stopping of the

trains on the main line to run a locomotive in for a car or two of coal on the siding is altogether out of proportion to any benefit that would come from it. As to whether I would be going into those mines for commercial coal every day (1710), I would, probably, if they were running. I do not know whether in our district car supply is equalized as between divisions. I think that is customary. As to the effect, if that were done, of the assignment of foreign line fuel cars in a given district on the commercial supply I can only say in our district, the only place I know anything about, that the tremendous number of foreign cars coming in there for fuel is a great benefit to our district. I think the car supply of our district is equalized as between it and neighboring divisions of the Baltimore & Ohio Railroad. I have never traced it up. If it is, the introduction of this vast number of foreign line fuel cars there does not necessarily decrease the commercial distribution. (1711) That is
2189 because the other sections of the Baltimore & Ohio Railroad get foreign fuel cars from other carriers. I do not know whether they are in the same proportion. If we did not get those foreign fuel cars, all of the cars in that region would not be available for commercial distribution. They would be available for all kinds of business, whatever there was, railroad or commercial.

By Commissioner AITCHISON:

I do not understand that there is equalization as to assigned cars, although I do not know. I have never inquired. I do not think, however, that the assigned cars are counted in any of the districts.

By Mr. BALLARD:

In referring to the assigned car I have reference to contracts for a period of six months, or rather until the 31st day of March, of the entire output of a mine. (1713) The mines that had the Grand Trunk contracts that I spoke of were all of the operations of the Maher collieries that were open at that time. We have opened two or three since that time. That Grand Trunk contract was never for output; it was for an absolute tonnage, and not from each mine. (1714) We distributed the cars to the mines ourselves. They furnished all the cars. I do not know whether we called them assigned cars at that time or not. They furnished cars. That was up until nine or ten or possibly twelve years ago. Our contract then was to take these Grand Trunk cars and place them out at any of our collieries we wanted to. I cannot tell what proportion of the output of all three the contract called for. It was a rather large proportion. The contracts usually ran from 300,000 to 500,000 tons a year.

By Mr. CARMALT:

(1715) That was about ten years ago, when they bought
2190 the property of their own. I cannot just recall the year.

By Mr. BALLARD:

I testified that when we lost those Grand Trunk contracts under which we had assigned cars our running time was not seriously

affected. I do not remember what the percentage of commercial car supply was then. There is no reason, so far as I know, why as many operators as possible in our district should not be permitted to enjoy the business advantages of having contracts for railroad fuel, provided they are in position from the standpoint of quality and commercial credit to supply it. In stating that the selling price rises faster than cost due to decrease in running time, I had reference to the price of commercial coal, spot coal. (1716) I base that statement on my experience of a great many years. It was notoriously the case in 1920.

By Mr. CARMALT:

As to the price situation at our commercial mines, I did what was pretty foolish, I think. I set a price that I would not exceed and did not exceed.

By Mr. BRONSON:

The price was $3.50 per ton at the mine.

By Mr. BALLARD:

Concerning my testimony that I did not consider it safe to sell, that is, to contract, more than fifty or sixty per cent of our output, I meant by "output" not our potential output exactly, but what we can reasonably expect to get on the car supply outside of the assigned car mines. (1717) As to how I would be injured by an equal pro rata distribution of all railroad cars among all mines served by the railroads, that is a problem. I have never had it just that way. The railroads never compel us to take these contracts. We always solicit them the same as we do any other business, and other
2191 people have the same right to do that. As long as I am in business I want to have some railroad contracts, especially with the people on our own railroad. I do not know what would happen, nor can anybody else tell you, I believe, what would happen. I think it would almost bring paralysis on the whole country. I mean on the whole coal business. If the Baltimore & Ohio railroad had to increase its mines—and according to this testimony there were five hundred in 1916 and eleven hundred now—and had to divide up all they had, we might as well all quit.

Q. That is not the question. The question is not what would be done with the B. & O. Railroad's fuel order, but what would be done with the cars. We are not talking about fuel at all. See?

A. Yes.

As to how our business as a coal operator would be injured by an equal distribution of railroad cars among coal mines, I could not tell.

By Mr. LIVERIGHT:

I do not know what proportion of our coal was absorbed by railroad fuel contracts in 1920. It was never as much as half—not in recent years, not since we have been in the lake business. (1719) Assuming it was forty per cent, we disposed of the remaining sixty per cent by a very active selling force, out hustling around for busi-

ness all the time. None of it was on contract for longer than a year. We usually sell for a year. We like to and usually did contract from fifty to sixty per cent, reserving forty per cent for the spot market. We held the spot business down to $3.50, (1720) because I thought it was a fair price. I hope to continue business with my customers from year to year. (1721) As to dealing with
2192 railroads, we always try to have some railroad contracts as a back log. That enables us to have some certain production of coal and some certain place to put the coal. It is usually a starter. I am not in any way identified with any of these railroads that I supply. (1722) As to the three mines that have full output contracts, the one that has the Michigan Central contract is about twenty-eight miles away from the Maher Collieries' mine. The Nickel Plate contract mine is on the C. L. & W. division of the Baltimore & Ohio Railroad at Maynard, Ohio, and the Baltimore & Ohio contract mine is No. 2 mine at Glencoe, Ohio. Glencoe and Maynard across country are about five or six miles apart and about twice that much by railroad. The operating conditions at our non-fuel contract mines are similar to those at fuel supply contract mines. At our fuel mines we are supposed to work pretty near every day, but occasionally cars do not get in on time and the mine does not work that day. That is the exception. At mines not having assigned cars we work 200 to 230 or 240 days a year. We are on two railroads and have some advantage in that way. (1723) There is a difference of perhaps 40 days a year in working time between the two classes of mines, possibly fifty days. The cost of production at our fuel mines is less than at the other mines, depending upon the amount of work that we get at the other mines. The 100 per cent operation gives you better operating cost. I do not think the difference would amount to fifty cents a ton this year, but I don't want to testify definitely. The summer of 1920 was abnormal and unusual. (1724) Our busiest time in this district is in the summer, on account of the large amount of lake coal. I know very little about the situation in other districts, for instance, in Pennsylvania. I am president of a coal company at Kittanning Point, Pennsylvania. It is so
2193 small that I have not heard of them for ten or fifteen years, although I am president. It is not a commercial mine, but is working on Pennsylvania Railroad fuel. It is the mine of the Altoona Coal & Coke Company. It produces about six or seven hundred tons a day. (1725) I was told very recently that they had a full output contract with the Pennsylvania Railroad.

By Commissioner LEWIS:

It formerly delivered coal to the tender. We put a thousand tons a day on the Pennsylvania Railroad tenders; but that is gone.

By Mr. LIVERIGHT:

It did not use dumps at that time, but it does now. The locomotives of the Pennsylvania do not call at Kittanning Point any more. We move our railroad fuel cars in districts called for by the rail-

road company on an assigned-car basis, and do not have any commercial sales at all from that operation. (1726) I lived in central Pennsylvania twenty-two years ago. I do not know anything about it now.

By Mr. Brown:

(1727) I think we have operated our mines without fuel contracts. We almost always have them. I consider it to my benefit to have a railway fuel contract. If you were going to carry that out and every operator had a railway fuel output contract they could not all get in. No person has any monopoly of railroad business. (1728) We go after the railroad business the same as we go after anything else. We solicit railroad contracts, and steel contracts, and domestic contracts, and every kind. We have no output contracts except the railway fuel contracts. I hope to get individual cars, private cars, and make an output contract. I am working on it now.

2194 By Mr. Rowland:

As to the testimony of the Grand Trunk witness concerning the slowing down of transportation on the lines serving them and the effect of that on our mines in the same vicinity. None of us are getting the amount of coal we hoped for and expected to get. I think the Grand Trunk lines are in the same condition as the rest of us are. I do not know that there is any difference. If the Grand Trunk mines were given 100 per cent and the transportation facilities which would be required to move that 100 per cent, that might have an effect on the slowing down additionally of transportation to the other mines. And that slowing down of transportation might adversely affect those mines. One of the reasons we want whole output fuel contracts is to ensure us of cars, and that is the back log that we are after. (1730) As to whether if there were no assigned cars it would be necessary for the Baltimore & Ohio in securing its fuel requirements to divide them amongst all of the mines on its line, I do not know just how to answer that question. It would be unreasonable I think to expect or to compel the Baltimore & Ohio to deal with every mine and possibly a great many mines that do not want fuel contracts. Our summer business is the better business of the year because of our Lake business. In later years especially we have had a preferred car service under emergency orders for that business. (1731) Lake coal was run on a priority order or some kind of order this year, part of the time, and the year before, too.

By Mr. Bagnall:

Lake coal is not moved in assigned cars.

By Mr. Cuff:

(1734) I have no information as to whether the railroads use the assigned-car rule to induce shippers to furnish coal at unreason-

ably low prices. In our case we solicit the business. They do
2195 not ask us to take it. We take it at a certain price. We negotiate the same way we go after any other business. As to whether the price was conditioned upon the railroad's promise to furnish a full car supply, we made them a better price for fuel output than we would otherwise. By full output I mean they agreed to furnish a full car supply for the mine that entered into the contract.

L. D. Bennox, called as a witness, and being duly sworn, testified as follows:

By Mr. Carman:

(1735) I am a coal operator living at Grafton, West Virginia. I have three companies: The Southwestern Splint Fuel Company, operating one mine on the C. & O.; the Grafton Mining Co., one mine on the Western Maryland and two on the Baltimore & Ohio; and the Bloomington Coal Company, operating one mine in the Piedmont region on the B. & O. (1736) The mine located on the C. & O. is on the main line east of Charleston, W. Va. The aggregate rating of the five mines is 24 cars. All but the C. & O. mine are approximately the same size. It has eight cars and each of the others about four. They employ about 250 men in the aggregate in all of the mines. We have a railway-fuel contract now with the Baltimore & Ohio. (1737) It is a full-output contract. None of the other mines are working on fuel coal. The fuel mine is one of the Grafton Mining Company's mines on the B. & O. We have no contracts for fuel on a partial-output basis. Our contract with the B. & O. is a six months' contract entered into October 1st. The confiscation of coal through the summer and fall of 1920 mixed up our records and raised the price and hurt us financially. It disturbed our relations with our customers on the commercial coal. (1738) The railroads did not buy from us on a day-to-day assigned-car basis during the spring and summer of 1920. It was all commercial. As to the car supply since the strike finished in August, the first two weeks
2196 it was good. Since then it has been short. That is true of all the mines. They are all about the same. Our mines that were not furnishing fuel coal were suffering from the same conditions that have been testified to here on account of short car supply. In years of normal market the lowest percentage of our car allotment that we have figured on in making our commercial contracts on the Baltimore & Ohio has been fifty per cent. (1739) I confirm from my experience the testimony that coal can be produced better on full running time than on short running time and the testimony of Mr. Maher that on full running time on the assigned-car basis the selling price of coal remains constant during the period of the contract. I find in selling coal that the selling price rises as rapidly as the cost of production during periods of short running time. As to why I do not solicit more railroad-fuel contracts, I cannot tell whether railroad fuel is the best thing or not. We use some of it and we use com-

mercial. I like them both because they make my living. In the operation of our small mines I have not found any material difference, taking a run of years, between the two bases. (1740) I began working in the mines as driver, miner, and outside laborer and got to be boss finally. I was originally one of the class of migratory employees that Mr. McAuliffe talked about. In times of fifty or sixty per cent car supply I do not find that labor is dissatisfied because of the full time worked in the assigned-car mines. The nucleus of our labor supply at our mines is some regular men whom we have had for a number of years; that is, what we call regular workers and good citizens with unusual ability in mining. Those men stay with us when there is a break by strike or other conditions that disturbs operation and shuts down mines for several months at a time. We find them there when we open up again. I have not seen the tendency upon the part of our employees to leave our commercial mines and want to get employment in the assigned-car mines. The reason
2197 for that is that the turn is too slow at the assigned-car mine. There are too many men there. As explaining this, when I was working in the mines I have been over to a full-time mine from a commercial mine and gotten my full turn and then come back.

By Mr. BROSSON:

[In the assigned-car mine] the miner is working under high tension and any little wreck or anything of the kind cuts down his loading capacity. In a commercial mine it is not so much under pressure and he can make a little more money.

By Mr. CARMALT:

In the assigned-car mines the majority of the men work pretty regularly. I do not find the same migratory characteristics in the mine labor that Mr. McAuliffe testified to. They are pretty regular. There are a few "floaters." There are a few indolent men around any town or any business. (1742) There are so many things that tend to disturb them and move them from one mine to another that I could not enumerate them all. They have all kinds of human reasons for moving and coming back—relationship, proximity to a certain town, and so on. By relationship I mean a man will go, for example, where his uncle is boss, and a while later will send back for his brother and then his nephew and then his cousin; and you will get a whole raft of relatives.

By Mr. BROSSON:

If the uncle leaves, they will follow. We sometimes hire an uncle for that reason.

By Mr. CARMALT:

I handle the sales end of our business as well as the operating end. (1743) As to whether I consider the preferential contract which has been discussed here a practical way for the railroads to supply themselves with coal, I don't know about that. It was mentioned to

me once, and I couldn't accept it. I could not conceive of such
2198 a thing. I have not tried to operate under such a plan with our commercial contracts, or tried to negotiate a commercial contract on that basis. I would not undertake to negotiate commercial contracts upon the basis of giving the railroad the first loading. I cannot tell why. It don't look right. There is something wrong there. It is unusual. I don't like anything new. I would rather have the other fellow tackle it and see how he gets along. (1744) When we have a period of car shortage which infringes upon our ability to supply our commercial contracts I tell our customers we cannot get cars. As to whether we operate the coal we cannot ship among the contracts it depends upon the circumstances. Maybe one fellow will let me off and another won't. I maneuver around with them. There is no effort whatever upon the region in which we operate of assigning cars for railway fuel. I think it neither practicable nor economical for a railroad to stock coal in times of plenty for use in times of coal shortage. (1745) It would not affect me; but it would give the railroad a great deal more trouble and expense. I am a shipper, and I do not like to see them put to extraordinary expense. I feel that that will leak back to me eventually in some manner. I will be short of cars or have to buy hauls to help pay for it. I live in Grafton. It would not be practicable for the B. & O. there to provide itself with adequate facilities to stock itself with coal. It is a division point of the B. & O. They could not put any coal down there, because they would have to take it out of town and then bring it back. It would cost them a great deal to take it out and then it would cost them a great deal to bring it back. I think it would double the cost to the railroad company. If you have to handle and rehandle anything, the cost will make it prohibitive. The handling and rehandling would hurt the "hand" coal. I don't know about the stoker coal. (1746) We do not sell any coal to public utilities
now and did not to a very great extent in the past. As to
2199 storing coal the case of the railroad and the public utility are not parallel. The public utility can make a success of it, where the railroad is not so situated. The B. & O. specifies the quality of coal that we shall deliver to them under our contract. I don't know whether I could fill the specifications at the mines other than the one having the contract. I could fill them at one mine, possibly. (1747) The quality could not be maintained by distributing the contract through the region. Where I sell them coal, I have better coal than the other fellow. Not only that, but I have a picking table, and I prepare it. All the other mines around there won't put in one. The B. & O. coal is all inspected. Our mine on the C. & O. is located at Crown Hill, West Virginia.

Cross-examination by Mr. BALLARD:

If the carrier serving me is provided with a supply of suitable fuel, in proper quantities and at a proper price, so that I won't have

to buy any bonds or do anything to help it out, I have no objection to an equal pro rata distribution of railroad cars among the mines.

By Mr. LIVERIGHT:

(1748) I have no contracts for six months from October 1st with commercial consumers. The only contract is with the railroad. The rest of our coal we are selling on the spot market. When I said that I figured on a fifty per cent car allotment in making contracts, I meant that when I made a commercial contract I figured that my car supply might go down to 50 per cent, and I wouldn't sell him more than 50 per cent in case I got down to that point, because I wanted to make delivery. I mean fifty per cent of my rating. My mine is not rated twice as high as it should be. It is not rated high enough to suit me. At this mine, where we ship railroad fuel coal, they do not get as good a turn as at the other mines. (1749)
2200 There are more men there and any little trouble will decrease the turn promptly. There are more men who stay and the camps are a little larger at an assigned-car mine than at a commercial mine. The commercial mine don't want so many and don't need them. (1750)

By Mr. CARMALT:

As to the basis of my former answer to Mr. Ballard, I understood the question to be that the railroad had all the coal it wanted through some other way than assigned cars and that it was satisfactory and everything was moving along 100 per cent, and would I have any objection then, and I said "no."

FREDERICK W. BRAGGINS, called as a witness, and being first duly sworn, testified as follows:

Direct examination by Mr. CARMALT:

I live at Columbus, Ohio, and am president of the Lorain Coal & Dock Company, a member of the National Coal Association through the Pittsburgh Vein Operators' Association of Ohio and the Logan Operators' Association of West Virginia. This company operates four mines in Ohio, in Belmont County, and two in Logan County, West Virginia. (1752) The Ohio mines are served by the B. & O. exclusively, and the West Virginia mines by the Chesapeake & Ohio exclusively. The aggregate rating of the Ohio mines is 141.67 cars, and of the two W. Va. mines, 73 cars. Practically 1,700 men are employed in Ohio and about 350 to 400 in West Virginia. The mines in Ohio are practically within one to two miles of each other. Some of the mines are rather closer than that. In West Virginia the mines are very close together. (1753) We have no railroad-fuel contracts in West Virginia. We have fuel contracts in Ohio with the Baltimore & Ohio and Big Four Railroads. One of our mines is working on the assigned-car basis. Our contract ar-
2201 rangement is that the Big Four Railroad shall have 12 cars per day from this one mine, and that the B. & O. Railroad shall have the balance, which is about 26 cars per day. It is what we call

a joint railroad mine. I have no partial-output contracts with railroads. From Ohio and West Virginia, the commercial coal is sold in Ohio, Indiana, Michigan, part of Wisconsin, and in Canada. That is the general market. That which goes to Canada goes over the lake and the Northwest. We do not own any docks on the Great Lakes.

2202 (1754) As to the confiscation of coal in the summer and fall of 1920, it was very disconcerting and upset our contractile arrangements and disturbed our customers a great deal. We would send notices out to our customers that we had a certain number of cars, and they would be expecting that coal, and the next thing it turned up that it was confiscated. The dealer didn't get his coal. That sort of thing upsets your business and disturbs the relations between your company and your customer. Through the year 1921 the market for coal was no good at all. We had practically a full car supply that year. Since the end of the strike this year the car supply has been extremely bad. (1755) The strike ended about the fifteenth of August and we had a very good car supply for possibly ten days or two weeks. Then it went off and has been off ever since. I am a little confused on the date of our contract with the B. & O., but I think it was September 1, and our arrangement with the Big Four Railroad was consummated before October 1, but effective on that day. Our contract with the B. & O. was for a period of over six months; likewise with the Big Four Railroad. We were negotiating the contract with the B. & O. on September 1, and for the 22 years we have been selling the B. & O. Railroad coal we have never changed. We have always had a contract with the B. & O., and this contract was negotiated during the month of September, and I think it was effective beginning the first of October. (1756) We have always supplied them with coal whenever practicable, and have done it upon an assigned-car basis whenever permitted by law. Our commercial mines have been effected by the car shortage in the same manner as have the other operators who have testified here. We are supposed to have our proportion

2203 of the available cars for distribution to all commercial mines. We usually calculate in our business to make our contracts on a 50 per cent car supply; that is, 50 per cent of the supply that we have had on capacity over a term of years, which represents the average output of the mines. There is a combination of factors that have contributed to the shortage of cars of the current season. (1757) One of the principal factors was the railroad shopmen's strike which started on April 1 and ended, I believe, eleven or twelve weeks thereafter, and the attendant breaking down of cars and locomotives, and on the C. & O., we have heard, and on the B. & O. also, that on account of the shortage of water they have been obliged to use water which has rusted out their boilers in their engines and broken down even the repairs which have been made. As to whether I have ever known of a power shortage in previous years since I have been operating in Ohio and West Virginia mines, my answer is

"yes." I have been in the coal business for about 25 years, and have never experienced in that time a car shortage such as we hav been experiencing this year of 1922. As to whether in those years w had any considerable shortage of cars due to a shortage of motiv power, I only remember one instance prior to this year where w have gone down below 50 per cent in our car supply. This year, as said, the shortage is largely attributed to the shortage of motiv power and cars. (1758) I have never before known of the element o motive power contributing to a shortage of cars in any such measur as this year. This year is abnormal in that regard. Our experienc is like that of the other operators in that we can produce coa cheaper on full running time than on short time. In selling o the assigned car basis there may be some slight fluctuatio in cost during the life of the contract, but we do not alway get a hundred per cent cars even at an assigned car min
2204 The contract price remains stationary. And to the extent th the assignment of cars tends to stabilize the cost, so the margi remains about stationary through the life of the contract. (1759) think that in operating commercial mines the selling price rises mor rapidly at commercial mines than the cost. I have to do with th sales end of the business for our company. I am not a practica operating man. As to what determines in a given year whether o not we will seek a railroad-fuel contract, it is a matter of policy Ever since I have been connected with the coal business in the opera tion of these large mines it has been our policy to sell a certain por tion of our output to the railroad companies; that is, to the railroa company which serves us. The cause of that is a division of the busi ness. A certain amount of railroad coal is consumed, a certai amount of gas coal, a certain amount of steam coal (1760), and certain proportion of domestic coal. Thereby we divide up our busi ness along practical lines. We always consider that we should sel the railroad companies, because we are on their lines. They ar serving our mines and supplying the engines which bring ou empties into the mines and take our loads out. In selling our coa I have never considered the use of a preferential contract. I d not consider that to be a practicable way for the railroads to suppl themselves with fuel. I could not make contracts for railroad fue on that basis in our territory, in consideration of commercial con tracts that we have. As to the reason, take industrial contracts wit manufacturers, with a steel company, for example. When they mak their contracts, they buy so much coal from you. They do not bu all your coal. They demand that you show no preference a
2205 between their contract and their neighbor's contract. In othe words, when we make a contract with an industrial concer (1761) we stipulate in that contract that they shall have their jus proportion of the available coal we have for shipment and during shortage for that time being. We cannot stipulate that the railroa contract will have preference in that respect and that the others wil share equally, first because the manufacturer will not stand for it

He won't give you his business on that sort of a basis if he thinks somebody is going to have an advantage over him. It isn't a just contract; at least that is the way we consider it.

By Commissioner AITCHISON:

I think in periods of emergency the coal operators come to Washington and very frankly talk with the Fuel Administrator and ask him to enter an order which will get them out of the fix with respect to their contracts so that they can supply fuel coal. They recognize that when an emergency comes their contracts must in some way be set aside or modified. As to why it isn't more orderly to contract that way in the first place (1762), so that when we get into a jam of the sort we have been in they won't have to take a crow bar and stick it into the works in order to do a little regulating, contracts are made with provisions for accidents and contingencies beyond the control of the operator, and as a war measure or as an emergency measure naturally the private contract is interrupted; and when it is an extreme measure then they must appeal to a higher body for special dispensation greater than we can give. I think it is out of our hands when the industrial commission or the Government steps in and in a war emergency appoints a fuel administrator and puts it up to the Federal authorities to issue priority orders. As to why we shouldn't talk over with our customers in advance the
2206 fact that these contingencies may arise and endeavor to come to some understanding with him in advance, in order that the interests, which everybody seems to concede must be protected, may be protected without the necessity of applying the law. Custom has made our contracts shaped as they are. It has only been during the period of the war and during this period of strikes in the last few years that our usual contractual relations have been upset. (1763) So far as our company can speak, we have never asked anybody to break our contract. It might be practicable, and it might not, for all parties, buyer and seller alike, to realize that when trouble comes and there is insufficient production and distribution and transportation the prior needs are to be met. I have never had experience along that line. But if it comes down to normal conditions when you have a hundred per cent car supply and don't have a hundred per cent of orders, then it is a case of the survival of the fittest and the fellow who can make the best terms will do it.

2207 By Mr. CARMALT (1765):

I understand that it is our contractual obligation, and it specifically states that during times of emergency the coal must be pro rated among our contracts. I think every company have the right to make the kind of contracts they desire and live up to it on the basis of that contract. We cannot compel any mine to make a contract similar to ours. Our customer would not contract with us on a preferential contract if our neighbor did not have a preferential contract with the railroad. (1766)

Cross-examination by Mr. BROWN:

In making our contracts we set aside one mine for railroad fuel and we consider the other mines commercial and apportion what we think will be the available supply among those. In treating the railroad as a customer we do not prefer the railroad over our other customers. The contract customers understand that we are not selling coal from the mine we specify. For instance, we have A, B, C, and D mines. We tell our customers "D mine is a railroad mine," and that A, B, and C are the commercial mines, and they have no interest in the D mine.

By Mr. BRONSON (1767):

We have two mines in the Logan district. As to the distance of our mines from the C. & O. fuel mines, I do not know just where the C. & O. buy all their fuel, but I understand it is on Island Creek. My observation has been that they do not draw labor from us. We have at least never had any complaint to make. We have no railroad-fuel mines at Lorado, West Virginia.

By Mr. BALLARD:

Our commercial contracts are usually made on a
2208 fixed basis. (1768) The commercial contract is not effected by reduction in running time and increased cost of production. We usually take account of that in fixing the price. Whatever price is fixed remains constant unless it is influenced by a change in the mining rate. If you have any surplus coal to sell and sell it in the spot market, then you can fix your own price upon it. If short running time is due to no market, your cost goes up and your price goes down. We have lake business and manufacturing business to take care of, and it must be divided up in something approaching a business like way. (1769) I propose to confine a whole mine to railroad business. I have no other proposal with respect to assigned cars. I do not recommend that railroad fuel be supplied from day to day out of a mine that is supplying commercial coal on other days and the assigned cars used for railway fuel.

By Mr. LIVERIGHT:

We have sought the B. & O. business for 20 years and are doing it yet. There is no reason why other operators could not solicit the business. (1770) There is nothing to prevent them from going to the B. & O. and selling them coal if the B. & O. are ready to buy.

By Mr. ROPIEQUET:

Our customers are ready to have us take coal from one mine for railroad fuel and then use the others for commercial distribution purposes so long as they know they are going to get their just proportion of the coal we have to sell. Our customers realize that railroads must have their coal before cars can be put into these other mines or the loads pulled out. They realize that the railroad companies are the arteries of our business and must have coal. As to

why they wouldn't be just as ready to let us take ten cars from
2209 one of our four mines as to let us take forty cars out of one mine, I presume that could be arranged. (1771) I would explain to my customers that it would be far better that the railroad should get its coal at a central point as a matter of economy in handling, and that we save the larger part of our output for distribution for commercial purposes. (1772) As to whether the spot price increased faster than the cost because of car shortage, that is regulated on a supply and demand proposition. The coal fields are in different groups that are very competitive.

By Mr. CARMALT (1774):

The B. & O. inspects our fuel coal.

Nov. 24, 1922.

S. C. HIGGINS, recalled as a witness, testified further as follows:

Cross-examination by Mr. BRONSON (1781):

I am traffic manager of the New River Coal Operators Association, and familiar generally with the New River district coal and transportation situation, particularly with respect to the Chesapeake & Ohio Railway. The executive committee of the New River Coal Operators Association instructed me to appear here in the matter of private cars. (1782) My objection to the assigned private car is with respect to facilities generally rather than the power situation; in other words, to prevent if possible a preferential service being given to private cars. I have no objection to the use of private cars per se as long as they are considered as private cars. As to whether instead of the Chesapeake & Ohio situation being partially due to the shopmen's strike, it is primarily and largely due to that strike, I cannot say that because (1783) the C. & O. has in a number of
2210 its shops 110 per cent of normal force working on power at the present time, and during the period of the strike a great number of its engines were being repaired by outside interests, and the main trouble is not in branch-line power, as I understand, aside from water conditions which obtained in some of the branches, but more particularly as to main-line power. The situation is due to power. (1784) There is a slight improvement in the power situation. It is not true that recently much of the Chesapeake & Ohio's trouble has been because of the inability of its connections to take cars. There were approximately 15,000 loads for movement on the C. & O. According to the information I have those loads were not hung up by reason of the inability of the Cincinnati and Columbus lines to take the loads through. (1785) A part of the reason for holding up the movement was the inability to get the cars up to the connections, and if my information is correct as furnished by the Chesapeake & Ohio, the Baltimore & Ohio and the Hocking Valley were the two principal lines which were holding back. Other lines were in position to take cars. (1786) There has been a greater amount of New River coal shipped west more recently than earlier

in the year. (1787) I would not say there is more New River coal moving west at the present time than is moving east. It would run about 60 per cent west and 40 per cent east at present. It varies and one week possibly it might be 60 per cent, but you could not take that as an average over a period of six months or a year. For the last three months I would say 40 per cent moved west and 60 per cent east. (1788) If the Chesapeake & Ohio situation was such that the system cars, which largely carry westbound coal, could not move west for any particular reason—congestion or lack of motive power or other causes—I do not regard it as preferential to
2211 move shipments eastbound either in private or in system cars when the carrier has the power so balanced as to be able to do that. (1789) I have referred in my testimony to empties going to the mines. The loads moving out of course would be related to the empties moving in. If the empty private cars moving into the mines were such as to enable a preferred movement of the loads out of the mines, I would regard that as preferential. If the other mines did not care to ship their coal east and there were power and facilities to move the cars east alone, that would not be preferential. (1790) The Berwind-White continued to ship east during the month of October, while the other New River district mines or mine operators shipped largely west, with the exception of one day in October, when the Berwind mines commenced a movement of Lake coal. On October 30th the first cars were loaded. I know that the Chesapeake & Ohio officials used every effort to induce the New River operators to ship coal east during the month of October. Letters were written to practically every important operator as well as the traffic managers, and personal conversations were had and telegrams sent to force the movement eastbound. The reason coal did not move east in greater volume was because there was no market at tidewater, principally on account of the great amount of British coal that came in, and practically the only markets we had were in the inland East. As to the market Berwind had, I am not in a position to answer as to its contracts.

By Commissioner AITCHISON (1791):

We should have been very glad to ship more coal to the East and to Washington had there been a greater percentage of small
2212 cars available for our loading. We have in the New River district 90-ton, 70-ton, and 50-ton equipment, and it was a very hard matter and has been right along, from about the middle of September up to the present time, to get suitable equipment for filling the inland East orders.

By Mr. BRONSON:

The size cars I mean are 50 ton and 70 ton. We had a greater percentage of 90-ton cars furnished and the 90 tons were placed in mines having the Washington contracts, if you please, and other inland East contracts; and they were compelled to ship them to one of two places, either to tidewater or to the Lakes.

By Commissioner AITCHISON:

The 90-ton cars were not permitted to go off the line of the Chesapeake & Ohio. We were not even permitted to load them to local points. (1792)

I asked permission of the C. & O. to load 90-ton cars to Clifton Forge and also to Ronceverte. We could not get 50-ton cars and they needed coal. We were advised by the Chesapeake & Ohio that they would not permit those 90-ton cars to be loaded except to either tidewater or the Lakes. I know that about this time the State of Virginia was after coal, but so far as the actual sale of coal is concerned I am not in position to say. We have such a limited car supply that it was impossible to take care of the requirements. The mines, as I have testified, have been averaging about a day and a half a week. As to why we should ship west rather than to points on the Chesapeake & Ohio, the coal in the New River district is used rather extensively (1793) in Chicago, Indianapolis, and other western cities on account of the smoke ordinances and they demand that coal and they have regular markets in the West and we attempt to take care of
2213 those western markets, as we have done in the past, and prorate the coal as between the various directions it moves. I think there was a market in Richmond, Va. I do not know why it wasn't filled. I know that Richmond uses New River coal.

By Mr. BRONSON:

I am familiar with the construction of the C. & O. 90-ton cars. As to whether they must be entirely turned over to be dumped, (1794) the Clifton Forge and the Ronceverte people offered to go to the expense of shoveling the coal into the pockets underneath in order to get coal.

2214 By Commissioner AITCHISON:

The 70-ton cars can be used in almost any trade except via Cincinnati.

By Mr. BRONSON:

There are certain destinations to which even a 70-ton car can not go, on account of the fact that the merchants, and other facilities in the city are such that they can not use them. That is particularly true of Harrisonburg, Va., where we have to haul it over a circuitous route, when necessary to get it in there. The New River and Pocahontas cars I referred to as placed at Rock Lick No. 1 were treated as system cars. (1796) In October the mines which received Berwind cars on two days loaded these cars west. I am advised that they loaded 20 cars each day westbound. A total of 200 cars of Berwind's went west. It is true the Federal fuel administrator was at that time using every effort to get that coal to the West, to the Lakes.

By Mr. CARMALT:

My understanding is that there were forty cars in October and the balance in November.

By Mr. BRONSON:

(1797) Besides the Berwind cars I referred to, F. R. X. cars have been sent into the New River district for loading.

By Commissioner AITCHISON:

Those are cars of the Ford Motor Company.

By Mr. BRONSON:

So far as the charging was concerned, those cars were treated as system cars when so loaded. Other than the few Ford system cars, the only private cars operated in the New River district on the Chesapeake & Ohio are Berwind cars. There are 2,000 of the latter, which operated generally (1798) between the mines of the Berwind interests and tidewater, backward and forward in a shuttle movement. Those cars have been used by other operators in the
2215 New River district at times when the Berwind interests permitted the use of the cars. At those times these cars were treated as system cars. As to my testimony that there was only one day since the first of September on which the Berwind mines were closed down (1799), we have daily reports showing the operation of all mines in the New River district. They are furnished from the records in the Chesapeake & Ohio offices. Those reports say that those mines were only closed down one day since the first of September on account of lack of cars. They were closed down at other times, for reasons given by the Berwind interests, no doubt, to your coal distributor. (1800) During the life of service order 23, July 25th to September 20th, the Berwind mines were furnished their own cars in excess of their field proportion, and during the life of service order 23 and during the life of the fuel distribution committee at Thurmond it was necessary that the Berwind cars be held back and not placed in excess of their pro rata. (1801) Any mine which works six days per week, as compared with other mines only working a day and a half a week, are certainly receiving more than the average of the field. I am prepared to say that the Berwind mines worked six days a week from September 1st to October 11th, inclusive. As to whether from September 1st to September 20th, the remaining portion of the life of service order No. 23, this was true, I think I can say, except for the month of August, when the distribution committee ordered the Chesapeake & Ohio, through the Interstate Commerce Commission representative, to not furnish a greater pro rata share of cars to the Berwind interests than was being furnished to the other interests, they have operated approximately full time during the entire period; and particularly from September 1st to September 20th there was a total of five days
2216 that they loaded less than a full day's loading. I am speaking of (1802) Minden 3 and 4 and Leland. Immediately following the dissolution of the fuel distribution committee and the departure of the Interstate Commerce Commission's representative, who instructed that they not be given a greater pro rata share,

they returned to the former practice of giving them all the cars they required for their loading. My understanding is that the only reason they did not give them all the cars all the time was because the Interstate Commerce Commission issued an order that we must not do it. I have not seen a copy of that order. It was necessary to hold these cars back at tidewater, Clifton Forge and Hinton, and during the time the Interstate Commerce Commission representative was at Thurmond, cars for these private-car mines were only brought into the district on his specific instructions.

By Examiner BARTEL:

(1803) The Interstate Commerce Commission representative was Mr. Maywood.

By Mr. BRONSON:

Those instructions were given to the C. & O. local people. I have never seen a copy of them. As to how I know such instructions were issued, I was not on the committee of the fuel distribution committee at Thurmond, but I had my office at Thurmond at the time that committee was in session. Concerning my testimony that at Clifton Forge the Chesapeake & Ohio will have one train of system cars and one train of Berwind cars standing side by side (1804) and that they consist will show the first train going out as being a train of Berwind cars, I referred to empties. As to whether I have actually seen the train moving, I have not. I do not have access to the consists of the Chesapeake & Ohio. As to how I know so much about it, it is part of my duties as traffic manager to acquaint myself with what is going on on the Chesapeake & Ohio, and the information as given is absolutely correct. As to the train of Berwind
2217 empties and the train of system cars (1805) going into the New River district, that would not be justified by the fact that a considerable amount of Berwind coal might move east to tide. The power on the Chesapeake & Ohio is not confined to the eastern territory, and if you have a surplus of power in the East, it would seem proper that you would distribute your power to where it was needed most. The connections were asking for cars at the time the C. & O. had this congestion westbound. The president of the C. & O. stated that the trouble on the Chesapeake & Ohio was just as much the power situation as it was the inability of connections to accept, and the operators made a personal investigation of the so-called reported ability of connections to accept, and found that the connections were asking for more coal. (1806.) That was during the life of the C. & O. westbound embargo, when the entire coal field was embargoed from shipping west and during the time that it was moving other than coal to connections. Specifically, that was October 23rd to 30th. At that time the C. & O. connections were certainly begging it for cars. I assume that the C. & O. president was correct in making the statement that this railroad did not have the motive power to haul the cars down to the connections. He did not say it was all due to that, but just as much the Chesapeake & Ohio as its

connections. He was speaking of the general conditions prevailing on the Chesapeake & Ohio. As to coal shipped eastbound to tide, the information I get from the C. & O. transportation department is that the average turn-around is eight days. (1807.) Westbound the turn-around in anywhere from forty to sixty days. Referring to my testimony that I found that the first 20 cars coming back from the Lakes arrived just two weeks later than the time they were loaded, (1808) I did not take the numbers of those cars. The twenty cars I mentioned as returning in two weeks' time may have been loaded on November 4th, 5th, or 6th. I mention that because the average turn-around westbound is so much greater
2218 than that, which indicates that the cars were actually moving faster than other cars. I did not see the twenty cars of Berwind's which went out on the 31st and returned in two weeks. The information was obtained from Chesapeake & Ohio officials. It would not be possible that the cars coming back were cars shipped from other fields. If my understanding is correct, he letters the cars in other fields differently from those in the New River and Pocahontas districts. (1809) My testimony that 29.4 per cent of the freight power of the C. & O. was in bad order was concerning the situation as of November 1st. The 29.4 per cent required longer than 48 hours for repairs. That information was supplied by Chesapeake & Ohio officials in the transportation department. (1810) I got that information from American Railway Association records, compiled from records of the Chesapeake & Ohio.

By Mr. CARMALT: (1811)

My proposition is based wholly on the preferential transportation movement, and particularly motive power and terminal facilities used preferentially by the C. & O. in the New River field. (1813) I made a suggestion that on account of the transportation conditions on the C. & O., private cars be not supplied to a greater pro rata share of equipment than is being supplied system mines when the facilities of the carrier will not permit the system mines to receive a greater number of cars. As to whether, when the Chesapeake & Ohio has plenty of power and facilities and there is a car shortage situation, I have any objection to their using them, even though the private-car mines receive a greater share than the system mines, I have no objection to the owner of the mine getting his full share, so long as it does not interfere with the mines customarily dependent on the system.

By Examiner BARTEL:

2219 Striking out the words "private cars" in rule 8 would cure it only to the extent that private cars would be eliminated from rule 8.

By Commissioner AITCHISON: (1814)

If they were not treated as private cars, they would not get their preferential treatment.

By Mr. CARMALT: (1815)

As to the matters to which I have confined my testimony here, I said the use of power and of terminal facilities.

By Mr. CURRY: (1816)

If we suppose there were two mines, for convenience one called the Berwind-White mine and the other the commercial mine, and each has a rating of sixty cars and there are in the yard of the railroad company sixty Berwind-White cars and thirty commercial cars, but the engine can pull only 45 cars, (1817) under the present practice on the C. & O., I would place the Berwind-White cars and then later place the commercial cars. In other words, if a locomotive could haul only 45 cars the C. & O. would put 45 Berwind-White cars at the Berwind-White mine, and would place none at the commercial mine until a later trip. To cure that, if the Berwind-White mine had been operating continuously, I would place the commercial cars first and then utilize the available power for placing the private cars.

By Examiner BARTEL: (1820)

I would object to the assignment of private cars in excess of the pro rata share at the Berwind-White mine as long as the facilities prevented active movement on the line.

By Mr. CURRY: (1821)

As to the hypothetical case, I would say that, assuming this is the first day and there has been no preferred service prior to this
2220 time, that the carrier should take the commercial cars and place them, if they were the first available cars, or place the Berwind-White cars if they were the first available, "but not to give the private cars any preference in the use of sidetracks or facilities over the commercial cars." If it meant placing 60 cars there, possibly that was due to the carrier bringing in more private cars than they brought in commercial cars, but in all instances the preferred service would occur beyond the distributing point. (1822) Understanding that there are two movements involved and you have 90 cars to move with a 45-car train, I would give the private-car mine and the commercial mine an equal distribution of those cars, the private cars to go to the private-car mine and the commercial cars to the commercial-car mine, 22½ cars to each.

By Commissioner AITCHISON:

I would prorate them on that basis, because (1823) then you immediately resolve yourself into the fact that you have a lack of motive power; and when you have a lack of motive power it comes back that you should not have had so many private cars available. (1824) I would not distribute cars on the basis of cars available in this instance. What I claim is that the mine should be given a pro rata share during periods of locomotive shortage and that rule 8 with private cars eliminated be put in application during those

periods. (1825) If in this same hypothetical case we only have 30 commercial cars available for the commercial mine and still have 60 Berwind-White cars available for the Berwind-White mine; but, unlike the former hypothetical case, now have sufficient locomotives to move all of those cars easily, I would give the Berwind-White its sixty cars and the commercial mine its 30 cars.

By Mr. LIVERIGHT:

If Berwind-White cars are loaded at other than the owners'
2221 mines, they are charged in the general distribution as system cars to the other mines. If there were a 50 per cent distribution and there are 100 Berwind-White cars available for a particular mine by designation of Berwind, they would take the full 100 cars that day. A mine other than the mine using Berwind cars, when it receives Berwind cars, receives a 100 per cent car supply if they order that amount of private cars; but if they have completed their particular loading, then they are penalized from receiving system cars until such time as their overage is brought down to the average overage of the field. That is to say, they are charged with the excess over the regional distribution, (1827) and made to suffer in the receipt of unassigned or system cars at a later date.

J. A. PAISLEY, called as a witness, being first duly sworn, testified as follows:

Direct examination by Mr. CARMALT:

I live at Cleveland, Ohio, and am sales agent and president of the Valley Camp Coal Company. I am interested in the Elm Grove Mining Company and the Kelley's Creek Collieries Company. The mines of the Valley Camp Coal Company are located (1828) in Allegheny and Westmoreland Counties, near Pittsburg, and in Belmont County, Ohio. We have 19 mines in the three companies, all told. These companies are all members of the National Coal Association indirectly through a local association. The Kelley's Creek Collieries mines are located at Ward, West Virginia, 18 miles out of Charleston on the Kanawha & Michigan, New York Central Lines. The Valley Camp mines are located on the Pennsylvania and the Baltimore & Ohio, those in Belmont County being on the B. & O. and those in western Pennsylvania on the Pennsylvania Railroad. The Elm Grove Mining Company has six mines, one in Belmont County,
Ohio, and the others in Marshall and Ohio Counties, West
2222 Virginia on the B. & O. The aggregate rating of the 19 mines is 561 cars and they employ about 6,000 miners. We have railroad contracts with the Baltimore & Ohio Railroad, the Pennsylvania Railroad and the Canadian Pacific Railroad. (1830) They are full output contracts and are handled on the assigned-car basis. The Canadian Pacific cars are delivered to the New York Central at Prescott and the Adirondack Junction, and taken to Randall and delivered to the Morgantown & Wheeling, where these mines are located. We have four mines furnishing fuel to the Pennsylvania,

four to the B. & O. and two to the Canadian Pacific. (1831) There are nine mines engaged in the commercial business. They are in Ohio and West Virginia. We have none in Pennsylvania. Our commercial coal goes as far as Quebec in Canada and about 400 miles west of Winnipeg, Manitoba, until it meets the Crow's Nest, coal coming this way through our dock at Fort William and in the States, New York, Philadelphia, one way, and the Dakotas in the west, through our docks. We own three docks, one at Superior, Wisconsin; one at Fort William, Ontario; and one at Milwaukee, Wisconsin. Those docks sell coal directly to railroads out in that territory. We have a term contract with the Great Northern Railroad for five years. They send the cars to our docks for their fuel. (1832) I would say that they are not assigned cars in the sense that we would call them that, but they do set in twenty or thirty for their own fuel, arbitrarily. They are assigned cars. They have no rating rules out there, but they set the cars in arbitrarily whenever they want the coal. I am a half-interest owner in a steamship company that has four steel boats. The Valley Camp Coal Company owns four steel steamers. I am interested in the Morrow Steamship Company, owning four, and I am also interested in a small way in the Midland Transportation Company of Midland, Ontario. I do not consider the last three years as representing a normal operation in the coal industry.
2223 It has not been normal. (1833) As to confiscation of coal, in 1920 we had a lot of it confiscated. As to the effect on the commercial market, it interrupted the movement very largely at the lake front. For instance, we had coal moving to the lake front that was taken when we would be figuring on it arriving at the lake for a vessel. These boats can make only so many trips a year, so we have to fit in the program of the movement of the coal to the lake front to have the coal at the lake front when the vessel comes. Then we work out another economic movement for the railroads at the lake front. We are charged demurrage if our coal lays over five days for any one vessel. If we have the coal at the lake front, we will take some other boat and they will take ours. We shift and work it out. We purchase, besides what we produce, about two to three million tons of coal a year, not all of which goes to the lake front, but a good part of it. (1834) We purchase coal also to take care of certain contracts. As to confiscation, there are quite a number of boats that carry fourteen, fifteen, in fact, one that carries sixteen thousand tons. You can imagine, from an economic standpoint, what that means, to accumulate that cargo of coal and have it ready and not delay the boat at the port, and also to save demurrage so as to have a car return to the mine for prompt loading. None of that coal is moved on assigned cars to the Lakes. There have been priorities put out for the Lakes at different times, of which a certain percentage of each fellow's output would be compelled to be shipped to the Lakes, and it was very equitably dis-

tributed all over the field. Maybe they would say, "Ship 50 per cent of your available cars under a certain rule." Our fuel contracts are not day-to-day contracts. They run for six months; some of them longer. As to the lowest percentage of car allotment that we have figured on in normal years (1835) we might figure a
2224 little higher than the other fellow on that. We always figure about 75 per cent. We do that large because we are in the habit of buying other people's coal to complete our contracts, and filling in our contracts, making shifts as we are able to do. It has not been as important a matter to determine in advance what would be the normal car shortage of an entire year. We try to meet those situations as they come. We do not try to discount the time six months, but we do try to discount thirty days ahead and make our calculations accordingly. We figure to run our mines as near full as we can. The car shortage of the current season is a combination of a shortage of cars, a condition of confusion in the railroad service following the shopmen's strike, and conditions of the industry itself. First, the conditions that (1835) existed started with a year's depression that was absolutely responsible, largely, from my standpoint, in bringing about these strikes and disturbed conditions with labor which followed the suspension of the mines and threw all of this business into a few months of the year. In explanation of that, take it on the Lakes, where our interests are the largest in selling coal, aside from our home railroads that haul this coal to the lake front. For instance, the lake coal. In 1919 23,000,000 tons was moved; 20,000,000 in 1920; in 1921, 20,000,000. It left about 18,000,000 tons to be moved this year in order to carry over the supply of coal in the Northwest up to May 1st, the opening of navigation. We still have 130,000 tons to move, and we will have done it. In March we had a complete 100 per cent car supply, and I would say that March was one of the biggest months, or as (1837) large a month as the industry enjoys. In the month of October, taking the statistics as we get them from the Geological Survey, the output was fully as good as in March. Apparently there was a tremendous car shortage in October. We had a car shortage at our mines in
2225 October as compared with March. In March the 19 mines that I mentioned loaded and moved 576,000 tons. In September, which was the first following good month that we had after the strike was settled August 16th, we had a fairly good movement—five hundred and twenty some thousand tons. In October the car distribution, so far as our mines were concerned, fell down to 276,000 tons, including our assigned cars to all of our mines. The cars drifted into other channels; and yet there was as much coal produced in the month of October as there was in March, comparatively speaking. That would indicate that there was a great scattering of the production to a larger number of mines. (1838) That would indicate an over-capacity measured in terms of car ratings more than in actual deliveries. I am familiar with what has been discussed here as a preferential contract. I do not consider that a

practicable way for the railroad to supply themselves with fuel. It is not economic from a transportation standpoint, nor will it supply engines with the proper fuel. There are different uses of coal. For instance, there are the municipal plants that put in automatic stokers. Some use powdered coal; some use slack through a 3¼-inch screen. Locomotive engines are adapted to nut and slack ranging from 1¼ to 1½ screen down to the finest part (1839); and the best operation, I believe, that has been gotten out of locomotive engines has been about 2 or 2¼ inch nut and slack mixed, which makes a lump coal that is very adaptable, again, for passenger engines or engines still using the old hand-firing method. I have been selling railroads all over the country practically for 25 years, having averaged traveling 50,000 miles a year, and I believe I have sold as much tonnage as any of them. I was first yardmaster at Ashtabula, in a small way, and I was with the Pittsburgh Coal Company for seven years; seven years with the Yohoghany Coal Company. Then I organized the Valley Camp Coal Company on April 16, 1910.

2226 I was night yardmaster at Ashtabula Harbor; telegraph operator, and I worked through a great part of the agent's department at Newcastle, Pennsylvania, nine years. (1840) With reference to coal going to the Lakes, the quality or the preparation desired is a coal run over a ¾-inch screen, taking the slack out of it. That gives us the slack for the municipal plants at home and other steam users, such as paper mills and the factories that have adopted stokers for that class of coal which is usually sold at a lower rate than our other prepared sizes. At one of our large mines in the month of March we produced 86,000 tons. We have an equipment that cost us, contract price, $135,000, for the preparation. It passes over two picking tables, with two pickers on each side. The coal that might be too bad is put out. Some of it is crushed and used as fine coal. The coal that we spent that amount of money for equipment for is used for stoker engines on the Pennsylvania Railroad, the more coarse coal for other engines and in other cases run of mine. Not all the mines in that field are equipped with that kind of equipment to prepare coal for railroad use. There are a great many of them that are not. The railroad contracts require specific preparation (1841) to get the best results. There are times when they will lend themselves and have to lend themselves to use most anything, but the result per train mile, as we gather from time to time, is the prepared coal. The contract ordinarily specifies preparation. The picking table at the mine is the greatest advantage. For instance, you take coal; it is mined in the dark, and there are scarcely any of the seams of coal but has some certain partings in, and as it comes out it is dumped on a conveyor and nursed up at the rate of 75 feet a minute, nursed over this picking table, and as it comes up three or four men on this side and three or four men on the other side throw out the impurities. As to the

2227 economy from other points of view than quality, to the railroads in using the assigned car to get their coal, we have a

property lying eighteen miles out of Pittsburgh, right in the heart of the most congested district, where we produce and have produced at this coal mine as high as 4,700 tons in one day. They come up there with an engine and 70 cars, and they are placed at our mine. We have a night watchman—what you might term almost a yard-master. He meets that train that comes in and tells where to spot those empties. The rest of it is done by gravity. He will pull out 70 loads. Part of them will go to Altoona (1842) in one solid train and part to a coal station at Pittsburgh, to Verona. We have another mine the coal from which they use in the Yohoghany district entirely for their fast passenger trains. That is our Soudan mine. The first mine is a very high grade of coal, and the preparation is 100 per cent. It is within eight miles of the railroad's Verona roundhouse and coaling station. Altoona is less than a hundred miles. (1843) Our whole company and its results are built up on economies. We go to the Pennsylvania or to the Baltimore & Ohio and sell them coal, and we figure that our mine is either liked or we have a better quality or the price is less for it in order to name a price that we have to deal with a full car supply. There are variations. With a half car supply it absolutely upsets any calculations you might want to make by which you could make a low price or make what we call a remunerative price in keeping with our (1844) investment or our money that we might owe the bank or our stockholders in the way of six per cent dividends. In regard to cars: We aim to run our mines as near 100 per cent as can be, and without assigned cars coming from the different railroads I do not know what our car supply would be—practically nil—if our own originating roads attempted to shift their cars to the Canadian Pacific or the Erie or the Boston & Albany or to any of those roads.

2228 In addition I am a firm believer in the fact that it is the only economic way that these railroads can get their coal and can have mines provided big enough to supply them with it; that is the assigned car basis. I believe also that the foreign roads sending their cars into the different districts on these roads should contribute somewhat to power during these particularly strenuous times.

By Commissioner AITCHISON:

The railroads have to have coal before they can haul the foodstuffs. We figure in every case to try for our own road to have its fuel first, because if it is not getting the coal it can not haul the foodstuffs. We have been confronted with that with reference to our boats. We had one boat tied up 18 days because (1845) the cars were not there to haul the foodstuff, and there is a congestion of boats at Buffalo to-day from that cause. Anything that disturbs that road from getting its coal quickly, economically, disturbs the movement of the foodstuffs.

2229 (1845) For instance, if I passed one of these gentlemen's mines and saw some Philadelphia and Reading cars in there and I did not have any in my mine, I would say: "God bless him!

He has got some cars there from away off, and I will get more of the rest of the cars that are left." By bringing these other cars in here you absolutely consume all the power of the terminals, you might say. The terminals hardly ever are congested when power is plentiful because they will move them through. They will move them some way or other; and the traffic will be hauled through each day. But I believe it must be worked out among the different roads in times like these.

By Mr. CARMALT:

As to the power in the terminals, that is a condition that we are suffering under now very largely. As to whether I know of any other period in the past when a car shortage has been brought about by congestion of the motive power in the terminals, (1846) I have known at various times complaints. Until this year I have not known specifically of a time when the Pennsylvania Railroad failed to deliver cars to the fields because of shortage of motive power. I have heard in a general sort of way that they were short of power. I have never heard it intensified as it has been in the present year. I sell coal to public utilities. I have a contract to-day with the Milwaukee Street Railway and the Racine Gas Company, the Montreal Gas Company, and one with the Detroit Edison Company, and one at Youngstown. We are giving them right now pretty close to 100%. (1847) We have not done so up to the present time. We have them provided for at Milwaukee. They use a different class of coal than the Pennsylvania. At some of their plants they use run of mine. They use it lately because it helped transporta-
2230 tion. You could get run of mine when you could not get screened coal, but in the between season they use what is called three-quarter inch slack; slack screened from the coal that goes to the Northwest and the Lakes. They use the coal at the point of stocking. They buy that coal, for instance, the Illuminating Company, during the late shipping season at low prices. They put it in their stokers. So that takes a certain class of coal off of the market and at a time when they can afford to take that coal in and store it. It would be impracticable for the railroad companies to store their coal. You cannot put a ton of coal down, even if you have a spot where you want it, and pick it up again short of 40 cents a ton.

By Commissioner AITCHISON:

(1848) It need not be assumed that if the policy of storage were adopted by carriers as a means of getting away from the assigned car, every ton that they used would necessarily go through a stock pile. I could hardly say how much they should have in the stock pile. There is an economical amount of coal that could be stored. I do not know. Everything would depend on the facilities near where the coal was going to be used. As to whether it would be the equivalent of working capital or money in the bank that could be drawn on when the ordinary distribution of cars would not give

them sufficient supply, it would be very nice to have a little storage somewhere. At our Collieries Company in Kelley's Creek we have a storage capacity of 42,000 tons. We store that and take it up and absorb it. There are a good many coal men that could help out the situation that way.

By Mr. CARMALT:

(1849) Between Pittsburgh and Altoona it would be a practical proposition to provide stocking facilities at the point of use
2231 only at a cost that would have to be reckoned with from time to time according to the market. The stocking point ordinarily would be on the ground and raised again to the trestles. There are improved methods, of course, that can be used, but if they are used it enters into another branch of a business that takes a good deal to do it. The methods that have been used from time to time have been that they find a spot somewhere where they can put in a side track and go in and dump coal on both sides, have the men shovel it out and keep lifting the tracks and raising them up. Then they will run tracks in alongside and take a locomotive and handle it in that way. There is a deterioration in coal being handled that way. One of the greatest losses is the moisture that coal takes up. Coal running over the winter will take up about 4 per cent moisture. We find the same on our docks in the Northwest. The railroad that has coal mines handy cannot stock coal, only in the matter of an insurance in case of a strike, without the expenditure of an enormous amount of money.

By Commissioner AITCHISON:

It would be feasible to broaden the policy of insurance so as to cover unusual fluctuations in car supply in (1850) you could anticipate when you were going to get a shortage of cars, but we get this one now in one way and the next in another. The present car shortage could not have been foreseen in time to have laid in any storage. Every one laid in a large storage during the month of March. Then along came the four and a half months strike that just cleaned up every ton of coal on the docks or anywhere else. I think there was every ton of coal put in and stored that could be done within reason, taking it from January up to the first of March. (1853) This big stock on hand permitted carriers to avoid, to a certain extent, the use of the assigned car, but the Canadian Pacific gave us assigned cars and we sent them clear down into Kentucky. I believe the Baltimore and Ohio furnished cars to the foreign lines in Kentucky.
2232 I do not know that I testified to anything excepting the Canadian Pacific cars which we received as assigned cars during the strike. We have practically nothing to base an answer on concerning the effect of storage in avoiding the use of assigned cars, inasmuch as the mines were all on strike at that time. If the mines went to work then we have this other condition following it, and from an economic standpoint to get the greater amount of use out of the motive power and the cars during the shortage assigned cars surely

are essential. Then you might add the quality of coal on top of that. That helps get the engines over the road.

By Mr. CARMALT:

(1854) During the period of the strike there was no shortage of equipment anywhere in the strike region, except in the non-union districts in Kentucky. There was no shortage on the Chesapeake and Ohio.

By Commissioner AITCHISON:

Some of those Southern carriers during that period practically ceased to funtion in the strike region.

By Mr. CARMALT:

(1855) I could not say generally as to whether coal that was moving during that period from the non-union territory was moving on priority orders. There was a good deal of confusion on priorities all the while. There was a lot of it moving. I know there were Canadian Pacifics going into that territory as assigned cars.

"Q. * * * Mr. Ballard informs me that the Kelley's Creek Colliery Company and the Elm Grove are not members of the National Coal Association.

"A. They may not be. I do not know much about the National Coal Association. They ceased to function directly with the operator, knowingly, or in any specific way that you could follow it. I know I donated to them every once in a while mighty liberally when they came around."

2233 As to the Canadian cars that came into these assigned car mines, I think we had cars from the Canadian Pacific up until the strike and then those cars went into Kentucky, but not so many of them. We had an average of 30 to 50 cars a day. In addition to that they have their own collieries that we furnish. I would say the Canadian Pacific furnished anywhere from an average of 125 to 150 cars a day for 300 days. (1856) The Grand Trunk about the same. We started with this congestion on August 15, everybody wanting coal all at once and getting a little stored. The whole country has been taken care of, practically, on coal during that period. An accumulation of 18,000,000 tons has been shipped up the Lakes. I never saw such support in my life, under the conditions, as the railroads gave their coal mines and everybody else in this period. We are confronted in the next thirty days with having too much coal. The equipment will soon pass into other ends and car distribution will take care of itself within a short time. In connection with our mines at our Kelley's Creek Collieries Company, with a rating of 103 cars, that is commercial coal. We do not take on any railroad or assigned contracts. We have a high grade coal used for domestic purposes and malleable iron works. (1857) We have had those assigned cars from the Canadian Pacific, with the exception of about 30 days in August that the Pennsylvania refused to take them, for the last two or three years and somewhat previous to that.

By Examiner BARTEL:

During the life of service order 23, from July 25 to September 20, we did not get cars on the assigned car basis from the Canadian Pacific. During that time we started cars of the Canadian Pacific on the Pennsylvania and 169 were diverted east of Altoona and used in general distribution. Later on assigned cars were permitted and those cars are now coming to us at our Morgantown mines as assigned cars.

2234 Cross-examination by Mr. BALLARD:

(1858) I think the assigned car is necessary to fuel the railroads economically and to give them the quality of coal that gives them the greatest efficiency. The form of the assigned car I prefer is where it gives them a chance to make a contract for the entire output of a mine, where the coal is adapted, and where they can get the preparation and the size to suit stoker engines, etc., and for a substantial period. (1859) I do not advocate as necessary for this purpose the day to day assignment of cars at mines that are in the commercial business at the same time. The preparation for that coal we sell to the carriers is made in the two grades, the stoker coal through a two-inch, that they use for their stoker engines, and the lump coal for their other service where they do not have stokers. We propose to sell all that to the carriers. And there would not be any of the output for commercial disposition from assigned mines where I sold them the output. (1860)

By Mr. LIVERIGHT:

We have no assigned mines in which we sell only part of the output to the carriers. The coal we deliver for use at Altoona, Pennsylvania Railroad, comes from one mine at Bolivar, Pa., and two mines at Parnassus or New Kensington, Pa. They are on the Conemaugh division. Then the passenger service coal is mined at Van Voorhees near Monongahela City. There are a great many other mines in the Yohoghany district which produce coal of a quality suitable for the Pennsylvania Railroad, but it is principally used for by-products. In the Conemaugh district there are a great many others who can produce the same quality as we do that would be satisfactory for Pennsylvania fuel purposes. (1861) I do not know
2235 the distribution, but they have always bought a lot of coal in that district. As to whether the Pennsylvania could distribute its fuel purchases to a greater number of operators, I think if they can produce coal cheap enough from an economical standpoint they would get an order the same as I do. It is simply a matter of getting the business and producing coal and preparing it. We have an extra preparation on that coal. If they do the same thing, or substantially the same thing, I can not see any reason why they might not just as well have fuel orders. I do not know specifically as to business conditions in central Pennsylvania in the summer time. I do not know that it is slower than it is in some other districts. We take some of the high class coal from central

Pennsylvania to the Lakes for smithing purposes and so on, and we pay a higher rate than we would sell the coal to the engine for. The tide-water business usually comes in along about fall and runs through the winter, while our lake business is all through the summer. I would think that central Pennsylvania is primarily a producing point for tide-water business and for New England business. I have not operated there and do not believe I could say whether there is a dull or slow demand in the summer but a high demand in the fall and winter. (1863) The demand varies sometimes in the summer and sometimes in the winter. Sometimes it is in the No. 8 district, sometimes it is in the Pittsburgh district. I would think that the demand for that quality of coal, being almost smokeless, would be almost as great as in other districts, aside from fuel coal for engines, which I do not believe is adapted. I would say there is a lot to be developed along the line of storage by railroad companies in dull periods in order to have cars used for that purpose released for revenue service in the fall and winter. Another thing that I think should be developed is that as to the consumer, the householder and the schoolhouse too, which never ask for coal
2236 until in the months of September, October and November, the three heaviest traffic months in the year, that coal, to go into a man's cellar, should absolutely go in from January to the first day of April. (1864)

By Mr. BROWN:

I have been selling coal to railroads for about twenty-five years, and have averaged traveling 50,000 miles a year. Sometimes our price to the railroad is lower than the price we make to our other buyers and sometimes it is higher. It is just according to conditions. As a rule we try to favor the railroads with the lowest possible price we can. Sometimes in order to keep them, not for any period, we have sold coal for less than cost in order to tide over a certain time and to keep the mines in shape. (1865) I never missed a dividend since I have been in the business, and we have 6,000 miners and haven't got a dissatisfied man and never had a lawsuit on a contract. We have filled them so close to 100 per cent; and we have handled 23,000,000 tons in three years. As to whether somebody else has got to pay the difference when the contract with the railroad is down to pretty close to cost, or occasionally below cost, I never look out for the other fellow. I usually get something out of it, some way or another.

By Mr. CARMALT:

My statement that we sometimes sold below cost is not confined to railroads.

By Mr. BROWN:

(1866) I am not speaking for any organization or operators in any given district, but am saying just what I do on my property. I have not been able to sell and produce the capacity of our mines in recent

years. I am not able to get 100%. Coal is so bulky and it is almost perishable on account of not being able to stock, as has been developed here, that you have to have a surplus of mines in order
2237 to fill in at the time when this demand comes, brought about by the conditions over which no one has any control. That appears different every year. (1867) You never get the same thing twice. Supply and demand and transportation influence the price of coal that is sold to a consumer. We give railroads coal cheap when other prices are high. For illustration: we have paid $1.00 a ton more to ship to the lake than what we got from the operations of the assigned mines going to the railroads. So it evens up. A steady supply, from an economic standpoint, is helpful to transportation, which we are short of. There are some other mines in our territory having equipment like ours, so far as the picking tables and the ability to separate the coal into various preparations are concerned. It is becoming more so every day. (1868) As to our shipments to the docks, we shipped since the 15th of August up to midnight, November 30th, about two and a half million tons. That is not all our own coal. That coal in some cases stays up there for distribution during the six months following, but in some cases we sell direct to the railroad that pays for it and carries it from the docks. It is distributed from the docks where it is stored during that period.

By Mr. CURRY:

Part of our mines that furnish fuel coal to the Baltimore and Ohio are located on the Pittsburgh division and Wheeling division. I do not know the divisions especially. It is the Pittsburgh division largely and the mines in Belmont County, Ohio, are on the C. L. & W. division. (1869) As to how many of the 63 mines shown in Exhibit 24, page 9, as on the Pittsburgh division, would be in position to furnish fuel coal to the Baltimore and Ohio of suitable grade and kind. I have no idea, in the absence of the names of the mines and the districts. In order to help out transportation 40 shippers at the lake front agreed to pool their coal. A priority order came out for everybody to ship 50% of his coal to the lake front. A
2238 lot of the new mines that were just being opened, a lot of the two and three car mines that are working in what we call the crop coal which has been passed up in the Pittsburgh district, opened up and shipped that coal to the lake front. I think we had over 1,000 cars rejected at the lake front. Some of it had to be taken out and dumped. You could not use it for slack. Of those 63 mines I dare say you have 20% of mines of that character. (1870) The rest of them would probably be able to furnish reliable coal, and I think they get a higher market than we have already sold the B. & O. Generally speaking, railroad contracts are absolutely desirable. We support our railroad contracts by merit. What I mean by merit is that we have an investment in the docks. We have a ten-ton clam that takes this coal out quickly from the boat. We make a

freight rate to the Northwest for 800 miles on our boats of 40 cents a ton. We handle this coal and store it for the railroads in the Northwest for 40 or 50 cents a ton. We feel that we, in a way creat' traffic and are entitled to sell the railroad enough coal to fuel their engines that carry that. In addition we create a way for the little fellow to come into the pool if his coal is right and take the same place as we have with our mines. We have purchased coal this year from over 250 small mines and paid them more for it than we got out of the railroad. During a period of slack times commercially it is desirable to have a fuel contract to keep our operations going, so to speak, and we merit it by making the price right. (1871)

2239 As to why—if railroad contracts are, generally speaking, desirable during periods of slack times—the railroad would not be able to negotiate contracts with a large number of operators under which the operators would furnish a certain portion of the output of the mine to the railroads under preferential contracts, maximum and minimum contracts, or similar contracts, I think they do; and I think it has been the practice to-day from an economic standpoint that wherever any operator does make his price right, and his coal is located economically, that is an open door. As to the plan like that of the Southern Railroad by which its contracts were distributed (1872) as shown in Exhibits 49 and 51, that might be agreeable to us because we have quite a few mines that would have more elasticity to twist ourselves in a case of that kind where there are other commercial contracts; but if I had only one mine I would not feel as though I wanted a contract of that kind. As to differentiating our situation from that of these men on the Southern Railway, I have not given that enough study to talk on that subject. On the other hand, I do believe that any distribution of that kind would tend to the operators getting their heads together and jacking the price upon the railroads. It opens the door wide.

(1876) Mr. Bronson, in response to a request of Mr. Ballard, offered an exhibit entitled, "Comparison of unassigned percentage of car supply with system fuel, assigned and unassigned percentage of car supply for the six-month period January to June, 1926." This exhibit was received in evidence as Exhibit No. 77.

JONAS WAFFLE, called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. CURRY: (1877)

I am secretary of the Indiana Coal Operators' Association, Terre Haute, Ind., and have held that position since January 1, 1918.

2240 I have studied the car distribution situation in our territory with a view to framing some rules which I thought would be helpful in this proceeding. My explanation of the method by which the carriers serve the coal mines in the State of Indiana will apply universally throughout the State. We use the so-called round robin

system of operating our coal mines. A mine either works a full day or it remains idle. On days of car shortage the carriers fill up as many mines as they can with sufficient cars to enable those mines to operate the full day of 8 hours. They undertake, as far as possible, to work the mines in rotation so that the periods of idleness between active days will be as nearly as practicable the same. It is quite essential that this method of operating our mines be continued (1878) in force, by reason of the fact that our coal miners to a very great extent do not reside in the immediate vicinity of the mines. In some instances they live as many as 15 to 20 miles from the mines at which they are employed and are obliged to travel between their homes and the mines on special trains operated for that purpose. There are aproximately 25 of these trains operated to and from the mines daily, on which there are handled between 9,000 and 12,000 men each working day. These trains leave their terminals in the morning about 5.30 or 6 o'clock and on the return trip in the afternoon leave the mines between 3.45 and 4.15. Our coal miners will not come out for a part day's work. If they did and had only three hours' work, for example, they would be obliged to wait at the mine from 10 o'clock in the morning until the return of the miners' train in the afternoon, as they have no other means of returning to their homes. (1879) It has been our experience that the application of the rules in C. S.–31, revised, to the distribution of cars under the round robin method of serving the mines has been anything but satisfactory and has resulted in considerable misunderstanding 2241 and confusion, both on the part of the car distributor and the coal operator. I find in handling these matters with our car distributors that some of them are absolutely at sea as to the proper method of applying the C. S.–31 rules to the method that we use in operating our mines. They become confused by reason of the fact that on the days when we operate a mine it receives a greater percentage of cars under the round robin system that it would receive if all cars were distributed on the pro rata basis that day. In Indiana we have an established working day of eight hours. The mining industry is 100 per cent unionized and our contract with the United Mine Workers' organization fixes the 8-hour day universally throughout the entire State. The mines start working in the morning at 7 o'clock and continue to work until 3.30 or 4 p. m., according to the length of the noon intermission. No mining of coal is performed on idle days or outside of the established working day.

By Commissioner AITCHISON: (1881)

These rules are based on an 8-hour day and the underlying principle on which they are constructed is that each day a mine is scheduled to work it will be furnished by the railroad with enough cars to load all the coal it can dump over its railroad tipple in eight hours, and that each mine will receive as a unit equal working time in hours.

By Mr. BRONSON:

If a mine does not work eight hours it is arbitrarily charged, under the rules we present, with eight hours. I have a [separate] rule as to joint mines.

By Mr. ROPIEQUET: (1882)

Rule No. 1. Under the operation of this rule the railroad car distributor will determine and announce late each afternoon the mines which are scheduled to work the following day, and
2242 those mines will be furnished with a supply of cars equal to their daily rating, or their order if the order is less than the daily rating. It is necessary in our State to give notice the prior afternoon as to whether or not the mines will work the following day by reason of the fact that a great many of our men utilize the miners' trains. We find that that works out very nicely. Rule 2 provides that all cars available for coal loading will be distributed so that each mine, as a separate unit, will receive equal working time in hours. (1883) That is, all mines except as provided for in rule 10. It also provides that the mines will be worked in rotation so that the periods of idleness between active days will be as nearly uniform as possible.

By Mr. BROWN: (1884)

I am not advocating these rules for application in any State but Indiana; and these rules will not work in any State unless you work the mines all day as we do in Indiana. If the commission sees fit to throw my rules into the discard, then we are in favor of what the National Coal Association is recommending in the way of revision of the rules under C. S.–31. (1887) The round robin method of serving the mines, that is, the physical serving of the mines by the carriers, the taking of the cars to the mines and putting the cars in at the mines, is the practice on every road in Indiana. It is universal throughout the State.

By Commissioner AITCHISON:

In rule 3 we provide a method by which the inequalities in working time may be adjusted. Inequalities occurring during the first fifteen days of the month will be adjusted by the 25th, and those occurring during the remainder of the month will be adjusted by the
10th of the following month. We feel that the periods pro-
2243 posed are entirely fair. rule 4 provides a method of rating the mines. This is the same method as in effect in C. S.–31, revised, except that we use tipple time exclusively. (1889) The principle of this rule is that a carrier shall be furnished with sufficient cars to dump all the coal it can load over its tipple in eight hours and be charged with eight hours. The distribution is going to be made on hours, and not on cars.

By Mr. BROWN: (1890)

There is not any difference in the speed of a tipple. They are all constructed about the same. The amount of coal that you can take

up is measured largely by the size of the pit car. As a rule the cage will make about one trip an hour. (1891) Every time they hoist they will hoist a five-ton car instead of a two-ton pit car.

By Commissioner AITCHISON:

In Indiana there is no coal stored at the mine. They do not store even screenings at the mine. We have 208 shipping mines in Indiana; 109 are shaft, 10 are drift and slope mines and 19 are strip mines, operating to-day. The slope and drift mines, all together, I do not believe would produce 1,000 tons of coal a day. I can not conceive of any way in our State whereby a man would be able to give his miners a greater amount of work with the same tipple time charged against him as a man who performs business in the usual way.

By Mr. BROWN: (1894)

I think we could have one set of rules in Indiana as to the loading capacity of mines there, another in Illinois and another in Ohio, and that it would work out without discrimination between the different operators. (1895) We want an equalization between Illinois and Indiana. It is a very easy matter for the carriers to figure the percentage of cars furnished to cars ordered at our mines for
2244 the purpose of equalizing. I assume that any set of ratings adopted anywhere will reflect pretty closely about what the mines can do. If they do not there is something wrong with the rating.

By Mr. GUTHEIM: (1898)

Under my scheme of distribution the ratings do not cut much figure anyway, the distribution being made on the basis of keeping the working time equal between the mines. (1899) As to our rules we start, for example, on the first of the month and all the mines may work the first three days. Then the next two or three days only a part of them work, but day by day they keep the hours as nearly as possible the same. There will probably always be a difference of a day in certain mines. You can not make them all come out the same on any one day. (1900) The basis for the car distribution is hours, regardless of cars. Of course there has got to be some basis for putting cars in at the mine. The basis of distribution is the idle hours. Our rules are predicated entirely on the assumption that there will not be any work in this so-called idle time.

By Mr. CURRY: (1902)

In Rule 5 I have provided a method of changing the rating of the mine between rating periods. (1903) Rule 6 is the same rule that is carried in the C. S.-31. Rule 7 provides "On such days as a mine is furnished with its daily rating, or order if less, it will (subject to Rule 8) be arbitrarily charged with having worked eight hours, regardless of the fact that the loading may have been completed in a shorter period." If a mine worked half a day and had

a break-down, it would be charged eight hours for the purpose of distribution. It certainly should be only charged four hours for the purpose of determining its rating, because it would only produce coal for four hours.

2245 By Mr. BRONSON: (1906)

Rule 8 provides "When a mine is scheduled to work and is furnished by 7 a. m. with a supply of cars equal to its daily rating, or order if less, or is furnished with a sufficient number of cars to start the day's loading and receives during the day, in time to permit of continuous loading, enough additional cars to bring the number supplied up to its daily rating, or order if less, and the mine fails to work a part or all of that day, due to any cause, other than transportation disability, the mine will be charged with having worked eight hours."

By Commissioner AITCHISON: (1914)

The dispatcher has got his schedule before him. If a mine is going to lay idle he would call up and say not to set any cars until the following day.

2246 By Mr. BROWN:

(1915) In any district the coal mines work very closely with the car distributor. As a matter of fact, mines do not ordinarily order cars. The car distributor knows what his rating is and that is what he sets in. He notifies the car distributor that he is going to work tomorrow. (1916) The car distributor says: "We are going to furnish you cars." The mine likewise notifies their men. There is not any order.

By Mr. BRONSON:

Rule 9 provides: "During periods of car shortage each unbilled car of coal on hand at a mine on the day it is scheduled to work will be counted as an empty car, and the number of cars furnished on that day will be the daily rating less the number of unbilled loads on hand."

By Commissioner AITCHISON:

(1922) Rule 10 is included to take care of the distribution of cars to joint mines in the event the commission reaffirms its previous decisions. (1923.)

(The rules referred to were offered and received in evidence as Exhibit No. 78.)

(A statement showing how rule 10 would work out where coal is loaded on two railroads was offered and received in evidence as Exhibit No. 79.)

By Mr. BELL: (1931)

The suggestions contained in my exhibit are predicated on the assumption that the commission will adopt the 150 per cent joint mine rule. I am not defending this rule and am absolutely neutral on that proposition, having constituents on both sides of the question.

By Examiner BARTEL:

(1933) Rule 11 is practically the rule that is recommended in C. S. 31. (1934) Rule 12 covers the distribution of cars to new mines under development. I have suggested a limit of 500 tons per day in lieu of the present rule of 150 tons per shift, not to
2247 exceed two shifts per day, in C. S. 31. (1936) Rule 13 provides that when the orders for special types of equipment exceed the available supply they will be prorated in proportion to the respective ratings of the mines ordering them. We have on some of our railroads in Indiana demands for self-clearing types of car, and a particular railroad does not have very many in their equipment, and orders on a particular day for that type of car exceed the available supply. So we conceived the idea of prorating those cars on the day basis of the ratings of the mines.

By Mr. CURRY:

I think they do that under the Milwaukee rules.

By Mr. BRONSON:

(1937) Most of our roads in Indiana do not own very many of the battleship type of cars, and frequently the road has orders for more of those cars than it can furnish. For example, they may have fifty available and may have orders for a hundred. So, in order to decide who shall have those cars, we provide that they shall be distributed on the basis of the ratings that day. I do not think that will cause a lot of extra train service. It is being done now in order to get away from any discrimination in the furnishing of those cars. When they are short we provide that they will be distributed on the basis of the ratings. It is not the capacity of the cars; it is the type that we have trouble with, whether it is hopper-bottom or side-dumping. We have a good many orders for the self-clearing car (1938) in the last few years since we have had so much track elevation in the big cities of the West. The demand for hopper-type cars increases. Our railroads in Indiana like the C. M. & St. P., and the Big Four have a good many of the self-clearing type, but some of the roads—the Chicago & Eastern Illinois for example—do not have any self-clearing cars.

2248 By Commissioner AITCHISON:

(1939) As far as I am concerned I can omit this rule from the rules. It is not important at all. The remaining rules just refer to reports.

Nov. 25, 1922.

"Mr. BRONSON. I will first offer as Exhibit No. 80 * * * the proposed mine rating rules for car distribution of the Chesapeake & Ohio Railway Company."

(The rules referred to were offered and received in evidence as Exhibit No. 80.)

S. C. HIGGINS, recalled as a witness, testified further as follows (1993):

By Mr. CARMALT:

I have been division coal distributor for the Baltimore & Ohio Railroad for a period of approximately five years. (1994) I appear here to present to the commission the rules that have been formulated by Mr. S. A. Scott of the White Oak Coal Co., which operates fifteen mines. (2015)

(The rules referred to were offered and received in evidence as Exhibit No. 81.)

EUGENE MCAULIFFE, recalled as a witness, testified further as follows (2016):

(Rules proposed by Mr. McAuliffe were offered and received in evidence as Exhibit No. 82.)

THOMAS H. WATKINS, called as a witness, being duly sworn, testified as follows:

Direct examination by Mr. BOYLE:

(2055) I am president of the Pennsylvania Coal & Coke Corporation, owning and operating mines located in Cambria, Clearfield, and Indiana Counties in central Pennsylvania. Our company's annual production is about three million tons per year, employing
2249 about 3,500 mine workers. Our shipments are over the lines of the Pennsylvania Railroad, New York Central Railroad, and Cambria & Indiana Railroad. Our market is in the eastern districts, including New England and all of New York. Our trade is with varied industries and public utilities, selling very little coal for railroad consumption, so that we can be classed as commercial coal producers. Our product is what is known as low volatile semibituminous coal. It is largely used for steam purposes and best suited for stationary boiler plants, including tugs and ship bunkering. In serving our class of custom it is essential that we should give dependable service in order that good will between us and our customers can be maintained and a proper and adequate public service performed. We have had a dependable, reliable car service to the collieries served by the New York Central and Cambria & Indiana Railroads. The opposite has been the case at the collieries served by the Pennsylvania Railroad. Owing to the unreliable character of the service in the way of distribution of cars upon the Pennsylvania Railroad, I have been compelled to investigate the reasons which brought poor service during certain periods. My investigations have led me to the conclusion that, owing to the character of the demands on the Pennsylvania Railroad for its service, it experienced difficulties which are not encountered by some of the other railroads. The Pennsylvania Railroad is one of the main arteries of transportation from east to west. Along its lines are located some of the greatest steel and iron industries in the country. It is called upon to move all varieties of manufactured articles, together with seasonal move-

ment of crops. When the demand for all these commodities is active at one time, they come to a peak load which makes it difficult for them to give satisfactory service to all of their shippers. The result has been that many consumers and shippers dependent upon them for coal from mines located
2250 along their lines have, in order to secure dependable service, gone into the ownership of private cars. Other consumers, notably eastern and New England railroads not originating coal, but large consumers of it, have been compelled to seek methods by which they would secure a dependable supply of coal. The result has been the use of the assigned car. During periods of business activity the Pennsylvania Railroad's facilities are crowded to the utmost; and if there is any suffering due to shortage of cars or motive power, or delays due to storms, strikes, or other unavoidable interruptions, the collieries and consumers depending upon the distribution of railroad-owned equipment bear the brunt of the burden. I have therefore come to the conclusion that some better method than the use of assigned cars must be found by the railroad if further dissatisfaction on the part of shipper and commercial user of coal is to be prevented, and especially if further unrest among the mine workers is to be avoided. I am making a distinction between the assigned car of railroad ownership and private ownership by consumers or producers. That the railroad should be served with a dependable supply of coal of suitable quality at reasonable prices is admitted. There is a grave question in my mind as to whether or not the present methods are the best. There is a certain form of special privilege in the use of assigned cars, or the ownership of private cars, on a railroad that I believe is dangerous. Every effort should be made to seek a more equitable method of securing coal for our railroad systems. For many years, as a member and officer of the National Coal Association, I have been active in my efforts to find a solution. The Bituminous Coal Commission appointed by the President of the United States, which sat in 1920 to arbitrate the differences between miners and operators, and which differences had resulted in the strike of November, 1919, heard my testi-
2251 mony upon this subject of assigned and privately owned railroad cars, and considered the question of sufficient importance to incorporate in their award a recommendation. Owing to the emergencies created by strikes that occurred after the award of this commission, there has been no definite progress made towards improving the situation. That a guaranteed supply af cars to take the full output of a mine results in greatly decreased cost is admitted by all. That the miners who enjoy the privilege of working at those mines are better off than their fellows depending upon an intermittent car supply is obvious. I have had prepared a memorandum showing, from November 1st to and including November 20th of this year (1922), the time worked and lost on account of various causes at the collieries owned by the company of which I am president.

This record disclosed the following: Out of 136 possible working hours the first colliery on the Pennsylvania Railroad worked 33 hours, the next one 57 hours, the next one 35 hours, the next one 30 hours, the next one 52, the next one 35 hours, the next one 27, the next one only 10 hours. On the C. & I. Railroad, with the same number of possible working hours, cars were furnished so that the time worked was 110 hours. Another colliery on the Pennsylvania was down to 30 hours. On the New York Central 91 hours, 104 hours, 68 hours, 95 hours, 83 hours, 80 hours, 88 hours, 85 hours, 98 hours, 36 hours, 64 hours, 57 hours, 34 hours, 25 hours, 93 hours, or an average time worked at all of these collieries out of possible time of 44 per cent. The collieries showing the lowest number of hours worked are collieries located on the main line of the Pennsylvania Railroad. The significance of these figures lies in the fact that at some of these mines there was not enough opportunity given the men to work to earn a bare subsistence. The natural result of

2252 that would be, if continued for any length of time, either a demand for increased wages or, on the part of the United Mine Workers generally, an insistence upon the demands they are already on record as having made—that is to say, a six-hour day and a five-day week—their theory being that only in that way can they equalize the working time so that the mine workers as a whole will get at least a reasonable amount in their pay envelope. As it is now some miners are realizing earnings that are abnormally high as compared with the workers in other kinds of industry. But the demand for increased wages and better working conditions does not come to the mine workers' leaders from the men who are realizing high wages, but is persistent from those who do not have the opportunity to work, save intermittently, and whose average earnings are far below what the miners claim to be a living wage. It is because of that condition, which I believe will lead to further unrest and dangerous experiments, even towards nationalization of coal mines, that I am an advocate of the abolishment of assigned cars or of special privilege of any kind in our transportation facilities. The progress towards a cure of this situation has been so slow that, in the interests of our stockholders and in the interest of our employees who are dependent upon us for a living, and in the interest of our customers, I have only recently contracted for 1,000 private cars to be put in use at our mines on the line of the Pennsylvania Railroad. It has been necessary for use to do this for our own protection.

By Commissioner AITCHISON:

As to what we are going to do with them (2061) if the commission accepts our suggestion, we will sell them.

By Mr. BOYLE:

I would prefer to dispose of them. I can not figure anything but

2253 an actual operating loss in the ownership of the cars. We expect to gain by increased efficiency of operation at our mine lower costs, rather. I cannot figure less than $75,000 loss in

owning these cars. As to companies that are not in a position to go into the private-car business, they would remain in the same position that we find ourselves now—handicapped. I have sat in conference with railroad executives and purchasing agents, with Mr. Gutheim as chairman, notably one conference held about two years ago at Pittsburg for the discussion of this subject. There was a suggestion made by the railroad representatives at that conference that they try the experiment of confining their purchases of railroad-fuel supply and of limiting the use of assigned cars to 66⅔% of the capacity rating of each colliery. That suggestion had a constructive note in it, but on account of the fact that colliery ratings are notoriously inflated it was turned down by the operators on the ground that assigned cars on a basis of two-thirds of the ratings of the mines would mean in effect 100% working time. I do not claim to be an authority on the western situation. I know something about the eastern situation and about the demands upon the railroads and the needs of the railroads. I also am quite familiar with the situation existing in central Pennsylvania. The testimony of Mr. Walter Jones, statistician of the Central Coal Producers Association, whose statements I have read, is based upon actual facts and figures and represents a condition. In reading over the testimony of Mr. Pearson, president of the New Haven Railroad, the belief that I had for some time was confirmed by his testimony that it would not be impracticable for them and other railroads in the same situation to increase their storage facilities at large central consuming points to an extent sufficient to store about 50% more than their current consumption monthly for about six months in the year, say from March
15th to September 15th, thus enabling them to curtail their
2254 demands in the fall and winter months to the extent of 50%
of their consumption. As I read his testimony, there was 2,400,000 tons a year consumption on the New Haven Road. Of course, there is a little larger consumption in the winter months than in the summer months. That would have to be provided for. If in five or six months of the spring and summer they added, say, 50 or 60 per cent to their current consumption or purchased more than 50 or 60 per cent of their current consumption and put that in storage, in the other months of the year, when the demands on the railroad traffic were larger, they could be reducing their stock pile, making a
better load factor.

2255 (2064) By Commissioner AITCHISON:

As to the situation which existed during the war, priority orders and things of that kind will not fit any theory. I am discussing something that will operate under normal conditions which we hope will be restored some time or other. The two great strikes since the war have affected the supply of coal and the distribution of railroad facilities and everything else. It is possible that some of those strikes were caused by the very thing that we are discussing and that the commission is trying to find a solution for. I do not

recall at any time during the war after this country got into the war and the Railroad Administration and the Fuel Administration functioned that there was any distress on the part of the railroads. That was because there was a governmental officer who was charged with the duty of seeing that they did get fuel and fixed the price (2065), and the country got fuel and the mines worked more uniformally and customers were served more uniformally. As to how the New Haven would handle itself in case of a car shortage for over a year, if they are going to get a priority, force that priority on them and make them store their coal where they can operate more efficiently. It would be in the spring and summer months. Press that coal in there at that time if you are going to press it at all and if you are going to see that they get their coal, rather than wait until the winter to issue an emergency order to take care of the railroads. This is an emergency order in the spring and summer months. I believe that the lack of storage facilities, possibly lack of judgment at times as to buying, are responsible for their not having their coal supply at a proper time. (2066) It is questionable whether there has been a real car shortage at any time except that which was caused by strikes at the mines or on railroads.

2256 To-day the aggregate coal supply for the country, according to the figures of the Geological Survey, is nearly two million tons more than is being consumed. Yet we have complaints of car shortage. It would be evident that there is a sufficient number of cars, a sufficient number of locomotives, a sufficient number of tracks and yards and everything else; but the fact that some people are complaining indicates that there is something the matter with the system of distribution. May be it is a lack of understanding on the part of the railroads and the operators and everybody. (2067) If eleven million tons are moving and that furnishes more coal than the country is consuming, yet it appears that certain workers are getting full-time operation under car-distribution rules, privates cars, or assigned cars, or something, and others are only getting thirty hours work during a month, it seems to me there is something wrong in the distribution of those cars that you are already assigning to that service.

By Mr. BOYLE:

I have been actively in the coal business approximately forty-five years. I do not know of any reason why railroads cannot store more coal than they now store as against these emergencies. I will not say that I could get many people to agree with me. Railroad people fear the investment, fear the cost of storing and taking up coal. (2068) It is a big item. If they will go into that practice more extensively than they have done, they would establish for themselves in my judgment a better load factor in the way of seasonal transportation, and they would help remove from the situation the factor of unrest that produces strikes and which has frequently cost some of the railroads many millions in money. The New Haven, ac-

cording to Mr. Pearson's testimony, in 1920 paid $46,000,000 for their coal, or $13,000,000 more than in 1921. If any part of that excess cost was due to the methods of transportation and distribution
2257 which helped to bring about the unrest and the demands of the United Mine Workers which resulted in the strike, there is a big broad field of study there. It may be that a part of that $13,000,000 might be saved or scattered over a period of time and might be put into storage facilities at the right place. I do not mean these little mines way out in the country where it is cheaper for a fireman and engineer to load it up themselves, but at the big consuming points, moving it at the right time of the year. That produces a better load factor. (2069) If I am right in my impressions the demands of the railroads are less as a rule in the spring and summer months than they are in the fall and winter months when crops are moving. The extra cost of investment in additional storage facilities for storing and picking up this quantity of coal would not be excessive in my judgment as against the present methods and against the danger that they are constantly in from insufficient storage and from the excessive prices they have to pay at times due to interruptions of transportation or from strikes at the mines. As a rule, owners of coal mines are willing to make a difference in price for coal to be supplied in the spring and summer months from that to be supplied in the fall. The possibility of making a saving in that direction, together with a better load factor during the year, seems to me to warrant an investigation and trial. That something must be done to free this country from national strikes on our railroads and at our coal mines is evidenced by the disturbance caused by the last national strike called by the United Mine Workers, and that strike was not settled, but the resumption of mining but was brought about by what might be termed an armistice agreement. Mining was resumed on a basis of working conditions as of March 31st last to continue until April 1 next, with an agreement to wait (2070) until that time upon a collection
2258 of the facts and recommendations based upon the findings of the Coal Fact Finding Commission now making a study of this situation. I am not charging our railroad friends with all the ills of the coal industry, but it is a problem which the Interstate Commerce Commission, the railroads, the operators, and the miners, as well as the general public, must all consider in a broad-minded way if serious national disturbances are to be avoided.

Cross-examination by Mr. BRONSON:

As to the question of overproduction, I think if there were fewer mines (2071) there would be greater efficiency on the part of railroad transportation. Our prorata distribution of the cars that are left after assigned and private cars have taken up the railroad facilities is so small that they only give us thirty hours of work at some of these colleries. If a mining district normally had about four hundred mines and they could produce enough coal to take

care of the supply coming from that district, and they suddenly jumped up to six hundred which are taking railroad equipment, that is one of the great troubles. We have got more mines and miners than are necessary, and there is a great waste in the industry to-day, but my point is that (2072) the distribution of the cars now works a hardship due to assigned and private cars using up some of the railroad facilities. As to whether if all the private cars were eliminated we would secure a lower car supply than we do now, the answer is "yes" unless the railroad replaced them. But whatever we did get we would get our equitable share of. In other words, I am a good deal like the miner. The miner likes a square turn and he works his principle of the labor union and everything else on a square turn. The trouble just now seems to be that in certain districts the railroads are
2259 handicapped by the shopmen's strike, poor motive power, etc. The facilities they have which are operating very well as a whole are distributed for the haulage of private cars and assigned cars, leaving certain classes of shippers and consumers at the mercy of an intermittent uncertain car supply. (2073) I do not care to distinguish between the private assigned cars and the railway-fuel assigned cars. After we get through with those we are short of cars, 10 per cent a day; and if we have to start our mine on the present situation, if there is a ten-car rating or a 10 per cent distribution, there may be a hundred mines and they can only work one hour a day. They must load the cars that day or we are penalized. We do not get them the next day. I do not think the abolishment of the assigned car both for railway fuel and commercial fuel would cure all evils. I think possible some improvement could be made in the situation by taking coal at more reasonable times than they do now. I do not think there would be any objection to the railways using their cars freely to haul coal from storage piles to the engine points in times of car shortage. (2074) They have to have the coal. It is only a question of whether they are getting it in the best way. I do not see any objection to the C. & O.'s using its cars to carry coal back and forth from its coal mines to take care of its need if it digs its own coal. But I do not know anything about its needs. I know it bought coal for its engines three or four hundred miles away from its mines, and if it had a stock pile there it might have been money in its pocket to use a stock pile rather than its coal cars. I would not see any objection to a railroad using its own cars to carry its coal for its needs during a period of car shortage. I have an open mind and am not clear on the subject of entire output contracts for long periods in which the mines would go out of commercial busi-
2260 ness entirely. (2075) It seems as though they should have that right, and yet when it works out in practice you will find one group of miners working full time under that condition and those in commercial mines the other way. I think the railroads are interested in the subject themselves, and they should decide as to what effect that particular deal has on the miners in it and the mines next

to it, etc. I think they have as large an interest and more financial interest in the solving of that problem than any mine operator has. As to competition between the output mine and other mines, there is competition of labor. (2076) If the railway-fuel mine contracts to sell its output to a railroad for a period of a year and is out of the commercial business entirely, that does affect labor. So far as the operator is concerned, I do not think he has the same interest that the railroad has or that he has any interest in the proposition at all if he is a commercial operator, as I am. It is only the effect it has on labor that I am interested in.

By Mr. CARMALT:

As to our recent purchase of a thousand private cars, the estimated cost to us of about $75,000 a year to operate them is a rough guess based on the best estimate of car-mile I can secure. (2077) I am compelled (2078) to make that investment in transportation so as to insure to our customers the delivering of coal regularly and also the investment we have at the mines. Our mines are located just west of Altoona between there and Allentown. I understand that the mines east of Altoona are working a good deal better time than the mines west of Altoona. There are various branches of the Pennsylvania Railroad and that service seems to fluctuate. Sometimes one branch is ahead of another, and so on. I think that is made up in a month or so. As to whether the assigned cars are absorbing all the available power in the territory west of Altoona

I do not know but what they are also absorbing all the cars
2261 that are available. I do not believe they have any idle cars.

I am not posted on whether there is a very much larger distribution of commercial cars east of Altoona than west. (2079) I have been operating in that territory for a great number of years. As to whether I have ever before known the Pennsylvania to be in serious difficulty with its power situation until during the shopmen's strike and since, my answer is, "no," except that I have known them to be in just as serious difficulty about giving an ample supply of cars. Back in 1920 we had a very serious situation, more acute than this is, in the months of May and June.

"Q. That was the situation when the Government had distributed the cars pretty generally over the country because of going out of Federal operation? A. Yes, sir.

"Q. You do not attribute that to the Pennsylvania?

"A. The same opportunity was there of certain mines getting cars on an assigned-car basis."

(2080) Our company never has owned any interest in the Cambria and Indiana Railroad. We have two colleries on it and ship over it. The Weaver & Coleman interests control it and have mines on it, but I understand that recent control of it has gone over to the New York Central interests. I do not know. Being coal men as well as railroad men, Weaver & Coleman supplied themselves with a little railroad and with an abundance of cars. They put on 2,500

their own cars, and since then I understand they have increased
number. (2081) They have practically enough cars to take
re of 100 per cent of their output. They shuttle back and forth
tween the mines and the eastern trade. The cars from that mine
oved principally over the New York Central lines and the Reading
get to tidewater. I have not figured out the New York Central
parately as to the percentage we operated at our mines. As to
whether it was less than the mines located on the Cambria
62 and Indiana, I have two colleries here noted at 102 and 104.
The New York Central colleries ran about 80 or so; 36 or
rhaps 50 was the low number. I do not consider that the Cambria
d Indiana cars have absorbed the facilities of the New York Cen-
al so that it has been unable to give as good service on its own rail-
ad as the mines receive on the Cambria and Indiana. That is so
r as the cars are concerned. So far as motive power is concerned
ey may have affected it.

By Mr. ROPIEQUET (2082):

As to the effect of inequality in working time at mines produced
assigned cars upon the demand of the miners for the short week
d short day, I think the psychological effect on the miner's mind
s a result through this intermittent cause and has been to force a
emand for higher wages all the time. As I have said, the six-hour
y and five days a week is the solution.

By Mr. GUTHEIM:

I recall that in 1917 before we had a fuel administrator I came
Washington with respect to the railroad-fuel problem, which was
ite a source of difficulty before Mr. Garfield came into harness,
nd that almost immediately (2083) after he came here there was a
thering where Mr. Gutheim, Mr. De Groot, and I and several
hers prepared an order which Mr. Garfield issued to take care of
e railroad-fuel situation.

By Commissioner AITCHISON:

I do not know of any other industry where the rules for the dis-
ibution of cars consciously take into account the labor conditions
f that industry. I do not know to what extent the railroads or in-
ustries like the big steel corporations have considered that. I
otice that they have gone into private-car ownership in order to give
more stability to their mine workers, and to that extent they
263 have made large investments in private cars to insure steady
operating time at their mines. I believe they are influenced
n their policy by the labor problem. (2085)

By Mr. BOYLE:

I believe the assigned-car plan has a great effect on the wages of
he men so as to make the railroads pay more for their coal and will
ontinue to have an effect.

By Commissioner AITCHISON:

For instance, the miners' demands are based very largely upon the earnings of the men that have intermittent time. As the miners go through the field, as many of them do, the wages paid to the miner per hour, etc., have their effect upon the whole wage structure all the way through, including the carriers' own labor. And there is an effect on the country as a whole. I believe it tends to throw the whole wage structure of the country out of balance.

By Mr. BOYLE (2086):

I think that enters into the economical operation of the railroads, and that if you follow it through you will find that they pay about $10 per car for $1 they get out of it. Aside from the wage question, I feel that the cars could be distributed for transportation purposes better if the railroads would store more coal, together with other large consumers. The latter, like the public utilities, are compelled to do that now. They could at least help.

By Mr. CURRY:

As to the use of preferential contracts by railroads in securing their coal, I believe we made an offer of that sort in the conference at Pittsburgh that I referred to; to suggest that the railroads spread their contracts far enough to take in more operators, getting the kind of coal they wanted by limiting the quantity to maybe 25 or 30 per cent of a collery's output, they all then agreeing (2087)
2264 that the first 25 or 30 per cent of coal would go to the railroads and the balance of the output of the collieries to be apportioned to their other consumers. I believe the majority of the operators in our district would be willing to make such contracts. But there are a great many operators like ourselves who do not care for railroad business. We have separated ourselves from the railroads entirely. We do not want to go back into the railroad business.

By Commissioner AITCHISON:

It would help somewhat to have more operators. It is acknowledged that a hundred per cent is bad practice. (2088) There are certain mines whose product is not suitable for railroad use, and there is some coal which they should not be allowed to use, like our best gas and coking coal which is too good for that purpose. There is other coal which is probably too poor for it. Railroad men differ in regard to that. Some railroads are not very particular about the quality of the coal they get. Others think they have to have a special brand from a special mine.

By Mr. CURRY:

Cars are always used as a price argument by railroads in placing their orders for fuel, a guaranteed car supply.

Nov. 27, 1922.

E. M. POSTON, called as a witness, and being duly sworn, testified as follows (2100):

Direct examination by Mr. BOYLE:

I live at Columbus, Ohio, and am in the coal business. I was born at the mines, and have practically been associated in one connection or another with the business virtually all my business life. The mines with which I am connected are located in eastern, southern, and central Ohio, and several districts of West Virginia.
2265 These properties are in part controlled by the New York Coal Company and in part controlled by the Interstate Coal & Dock Company.

(2101) The annual production, generally speaking, of the properties I am in charge of is about two million tons, perhaps a little less. We employ at these mines between 1,500 and 2,500 men. I am president of the two companies named. The assigned car is unquestionably the most effective means of increasing coal cost that has yet been devised.

By Commissioner AITCHISON:

As to whether I am speaking of the three kinds of assigned cars developed here, any kind of assigned car or preferential car has that effect. (2102) The use of an assigned car is the cause of perhaps 75 to 90 per cent of all of the troubles we have at the coal mines. That has been my experience and so reported to me by various labor leaders with whom I have talked. The preferential use of a railroad car means giving a preferential amount of work to the men employed at the mines using the preferential car plan. The result is, as applied to railroad coal, a production of substantially 30 per cent of bituminous coal by very small percentage, or less than 30 per cent of the bituminous coal mines. (2345) Probably about 15 to 20 per cent of the bituminous coal miners enjoy the preferential use of the assigned car. When it comes to the making of a wage scale those men are out-voted by the men employed at the commercial mines. In other words the workmen that enjoy the use of an assigned car have an satisfactory annual wage, but the men employed at the commercial mines, depending solely upon the commercial car supply (2103), have an unsatisfactory wage. The assigned car miner has a satisfactory annual income from his work. The other man is dissatisfied. He says "We must increase our daily rate of wages because we have been employed so few days per year that our annual income is insufficient to meet our needs," and he insists upon an increase in the wage scale. The relation is perhaps 85 men dissatisfied with their annual income and perhaps 15 men out of every 100 in the union
2266 are satisfied. The assigned car is unquestionably responsible for what we have experienced in the last 15 or 18 years, namely, a constantly increased wage scale whether it be in a year of depression or in a year of business activity, and any industry that is treated so that you must have an increase in order to properly support the men in that industry in years of depression is indicative on its face that

our treatment of the question is wrong. (2104) Our scale of wages in the bituminous mines is so much higher than other industrial wage scales that those high wage scales serve to attract an undue number of men to the bituminous mines. For instance, in 1918 we produced 579,000,000 tons of coal, with about 615,000 men employed in the industry that year. In the year 1921, in which our bituminous production fell to 415,000,000 tons, our employes had increased from 615,000 in 1918 to 663,000 in 1921. No assigned cars were used in 1921, but the high wages produced by the assigned car attracted this undue number of men at a time when the work was short, even among the legitimate miners. In 1918 the average tonnage production per person employed in the bituminous industry was about 942 tons. So that the annual budget of that miner and his family was assessed in that year against 942 tons (2105) whereas last year the budget had to be assessed against 628 tons. That represented an increased cost (2347) of something like 42 per cent and that is due to the fact that the wages are really too high when compared with the basic wages of other industries. I am just comparing the day wage scale. (2106) If you assume our annual production to be 500,000,000 tons and that is produced by 500,000 men, that is 1,000 tons per man employed in the industry per annum, a near approximation of what was accomplished in 1918, 942 tons per man. If we assume that the carriers use 28 per cent of this coal, 140,000,000 tons per annum, and that about 15 per cent of these 500,000 men—or 75,000 men—are employed in its production and if we assume the cost per ton to be the Federal Trade Com-
2267 mission's labor cost, $2.04, then the 75,000 men (2345) producing 28 per cent would each have an annual income of $3,808.68, as compared with $2,040, under equal distribution. If we distribute the remaining 360,000,000 tons among the remaining men it reduces the income of those men to $1,727.88 per annum. This is an assumed figure in the matter of men employed. If, instead of using 500,000 men, we use the 663,000 men employed last year (2107), the wages of the men who work steadily remains as fixed here, $3,808, that is 15 per cent of the 663,000 men, or 95,000 men. That means that 568,000 men would get the distribution of the remainder, which would be too low in fact; and the result is that those men are all dissatisfied. We have 80 to 85 per cent of our bituminous miners constantly dissatisfied with their day wages; whereas, in the anthracite industry, where they have no assigned cars the day labor is satisfied with a day wage of 55 cents an hour (2345), or $4.45 or thereabouts per day. That means that those men are satisfied because they are employed. These other men are dissatisfied because they are unemployed. There are certain times of the year when the car supply of the commercial mines and the assigned mines is equal. In the last 130 months we have had 87 months in which we had a car surplus and 43 months in which we have had car shortages. If during these 43 months approximately one-third of the total, 15 per

cent of the men had steady employment and the remainder spasmodic employment, and if then it be assumed that all were equaled up and the assigned car had been done away with (2108), our labor scale would have been considerably lower than we have now. Concerning the figures as to the result of pro-rata distribution on the C. & O. instead of the assigned car basis, the difficulty we experience is much broader than that. For instance, we have certain mines which work on assigned cars in our company, of necessity. Those conditions create all our troubles. The average miner work-
2268 ing at an assigned car mine who gets an excessive amount of work is just about as (2109) dissatisfied as the man who gets short work. They do not like to take advantage of their neighbors. My thought is that the assigned car is penalizing the user of the assigned car more than any one else. Concerning the C. & O. situation the proportion of assigned cars on that railroad, for example, does not compare with the New York Central lines in Ohio. You are assuming a 10 days' work supply on the C. & O. That has not been realized. We are getting about one day's work a week and about two days the week following. (2110) I do not know just what the increase would be [if there were pro rata distribution], but the carriers find that the C. & O. (2345) is a little too far removed to use the assigned car in such a year as this, for instance. I presume the C. & O. is dotted with private assigned cars. As to the Berwind-White, they haven't anything like the tonnage on the C. & O. that they have on the Pennsylvania. We have mines adjoining the Berwind-White. Their Minden mine adjoins our Rock Lick mine. We loaded in the first ten days in October a lot of cars for the Berwind-White people. I know exactly the disturbance among our labor when the assigned car is running with the Berwind-White people. If the 15 per cent moving during one-third of the time and getting steady employment were cut down in their employment to the same basis that their neighbors get by distributing cars equally, you will reduce the cost of coal at least $1.00 a ton to the railroad. (2111) It is largely wage cost that I have referred to in connection with that saving of a dollar a ton. I think the basic scale of wages of miners will ultimately come down. My experience with railroad men is that they really do not understand that they are putting up the costs on themselves by the use of the assigned car. (2112) The 15 per cent I mentioned does not refer to the industry that bought cars and owns them, but refers only to the assigned railroad car. The anthracite industry uses no assigned cars. The reason is because it is a luxury and there isn't sufficient anthracite to go around.
2269 The anthracite does not go to tidewater. It is more generally distributed from its own district. It is not distributed in short hauls. (2345) It is burned farther afield from the mines than is any bituminous coal. (2113) I cannot give any idea of the percentage of men who benefit by the assigned cars of all three varieties. The 15 per cent includes all the fuel produced for the railroads. (2114) With reference to labor's satisfaction or dis-

satisfaction, in the anthracite mines we all know that it requires much more skilled miners to perform the work; it requires more skill and muscle to produce a ton of anthracite than a ton of bituminous. The anthracite miner does not have the machinery aids in the industry that we have in the blanket or bituminous work; with the result that a man gives up greater effort for, say, $4.50 a day and is better satisfied than the man who gets $7.50 a day and yet is dissatisfied because his annual employment is cut to pieces. We are entitled to a very much cheaper production of bituminous coal than we are now experiencing in the United States. We have the best bituminous miners in the world. The miner produces more coal per shift and per annum than any others in the world. It is because of the mistreatment of that man that there is brought about the high cost, because he is sufficiently organized to demand and receive consideration. By "mistreatment" I mean inequality between the treatment of the miners in the assigned car mine and in the unassigned car mine.

By Mr. BOYLE (2115):

The United States contains more coal deposits within its boundaries than any corresponding territory in the world. There is no coal shortage in the United States and there is no shortage of labor for the development of that coal. The bituminous coal industry in the United States is in trouble as shown by the Geological Survey week after week, due to failure of transportation. Our coal is generally diversified in its distribution throughout the United States.
2270 Most of our States have coal. We have large centers of population where coal is consumed. There is no well-regulated coal mine that shuts down at 4 o'clock in the afternoon that hasn't at least two days' coal supply broken loose from the face. The only reason that it cannot be consumed in the cities is because of lack of transportation facilities to get it there. (2116) Our annual consumption is not up to half a billion tons. We have miners sufficient at the mines to produce more than three quarters of a billion tons. We cannot consume more than a half a billion tons. It is the link connecting the mine and the consumer which, when it fails, causes a coal shortage at the point of consumption. There is never a shortage of coal at the point of production.

By Commissioner AITCHISON:

There was no coal shortage during the strikes we have recently passed through. We had plenty of coal but no men to put it on the cars. You have labor shortage, but no coal shortage.

By Mr. BOYLE:

We all grant that the railroads must have first call on our coal supply. Without coal the railroads could not function, and no other industry could function, in our present state of civilization, but the assigned car does not aid the railroad. It penalizes the railroad more than any other consumer (2117) and necessarily increases

the railroad price. The railroads being the largest consumers of coal we have, it costs them more. It is true they get the coal a little cheaper perhaps to-day than you can buy your coal, but that does not take into account the effect the assigned car has had on the constant increase of wages year by year for the last 18 successive years. We have had no recession in bituminous labor scales (2345), and yet we know that we have (2346) to economize in years of depression. The wage is so high that it attracts men from every other industry and dilutes their employment more than
2271 anything else in years of depression. The use of the assigned car where it results in putting one miner's wages ahead of another's should be abandoned. It is perfectly proper to use the assigned car provided you do not misuse it.

By Commissioner AITCHISON (2118):

If you would assign a certain portion of the equipment of a railroad for its fuel, all right; but do not let that road assign that equipment to my mine to the exclusion of my neighbor's mine. If you will do that (2346) you will drive from this industry the surplus men. We have a form of miner who is of very little (2119) benefit to labor generally, and very little benefit to other industries, because he will only mine coal in the winter. He goes into the mine and tries to divide the work with other miners. He dilutes the labor of the legitimate coal miner. My suggestion is not necessarily that carriers should have the first call for fuel among all the mines in a given district, but so that they do not pile up the work in one mine to the exclusion of others. Do not, in other words, distribute your railroad fuel orders through the assigned car so as to destroy the work of the commercial miners, which is at least 2 to 1 in the relation of tonnage.

By Mr. BOYLE (2120):

Aside from the day to day production of coal, the carriers should supply their coal at least some months in advance. I think the carriers' supply of storage coal should never run less than, say, 75,000,000 tons, or fluctuate between 75,000,000 and 150,000,000 tons. (2346) If the carriers will use the coal car when it is otherwise idle, to supply a storage stock of coal, they will have no occasion to use the assigned car, and at a time when the public is needing the coal the railroads can stay out of the market and rely upon the store of coal upon the ground.
2272 We have that practice operating now up in the Northwest. The carriers usually have a six months' supply of coal on hand when winter comes, by reason of the lake dock coal supply. But it is unfair to all coal consumers to have the railroads come in and say, "We must have assigned cars because cars are short." That is the time the public needs cars. (2121) In 1921 the railroads could have acquired almost any quantity of coal on the basis of from $1.50 to $2.00 a ton. If they had put down 100,000,000 tons of

coal they would have had $200,000,000 involved in its deposit. This year, along in July and August, the railroads were paying five, six, and some as high as seven and eight dollars a ton for the same coal that could have been bought last year at $2.00 a ton and put on the ground. In forty-three of the 130 months I referred to we had car shortages. It would have been a very easy matter to have supplied sufficient coal during those months of car surplus to have carried the carriers over the 43 months of car shortage. That takes in a period of some eleven years. (2122) The cost of rehandling coal in storage would be infinitesimal.

By Commissioner AITCHISON:

The Standard Oil Company, at Whiting, Ind., have a pumping plant which means work continuously throughout the year. They had some difficulty with their coal supply in 1917. They put in coal storage the next year. Their superintendent has published cost figures with reference to putting that coal in storage and taking it out. My recollection is that it is 7.6 cents to put the coal down and 7.3 cents perhaps to take the coal out. It costs a little less to take it out than it does to put it down. They have 100,000 tons that goes into the pit, and then they pile 70,000 tons of coal on top of it. I think the carriers could probably approximate those figures. I am interested in one plant in which we put down coal just as I am suggesting here. I question whether it costs us over 15 cents a ton
2273 to put that coal down and take it up. We simply known the doors open, and the coal falls in place. (2123) That plant is at Floodwood, Ohio, and is a power station that supplies current generally to the mines and the cities of southeastern Ohio. Last April we had seven or eight months' supply on the ground there. We did not buy any high priced coal during the summer and when the strike was over we had perhaps sixty days' supply of coal still on hand. The situation in respect to storage for locomotives presents no greater difficulty than the situation of a stationary power plant. The railroads have stated places where they take coal; and a railroad can usually find a coal location at less cost than any other form of storage that we have.

By Commissioner AITCHISON:

It would be impracticable for the carriers to put storage in Pittsburgh. (2124) Pittsburgh is in rather an unusual situation because there are mines all around it. But they are obliged to take coal at other points. So long as your coal is stored at the mine you have the cheapest storage in the world. Pittsburgh is practically in the mines, but would not be a practical place for storing coal on the ground. (2346)

By Honorable THOMAS R. MARSHALL:

I did not mean that railroads ought to be compelled to buy of all the mines in the district. Let them buy from as many mines in the district as they like, but not buy from one mine so as to unbalance

the work in the district. (2125) There are certain mines that would not supply any railroad fuel coal. For instance, I have mines which would not want to put in any railroad fuel at all.

By Commissioner AITCHISON:

The railroads would not want to pay the cost of production there. The railroads use only one-third of the supply.
2274 Two-thirds is going to be balanced by commercial and industrial users. It does not require so very much allocation upon the part of the railroad to so distribute its tonnage as not to interfere with industrial tonnage.

By Mr. MARSHALL (2126):

We want abolished the system of assigning cars, in so far as it affects the cost, the price of coal to the public, or affects the working time of the men in the mines. (2127) It won't be necessary to furnish assigned cars to the railroad ordinarily, if the railroad will make provision for the coal supply and store that coal at points near where it wants to us it. I do not believe it is necessary to make them do that. They will ultimately do it. They do it now in England and will eventually do it in America. There is no incentive for the American railroads to do it when they can get an assigned car whenever they ask for it. If it had not been for the supply of coal above ground and in storage last year when they had the strike of miners and transport workers (2346) over there, England would have been in a pitiable plight. This is not new. It has been done. I would say that there should be no preferential assignment of cars to a railroad, except in times of emergency, and that when assigned it should be understood that the assignment will be withdrawn if they use the cars so as to disarrange the work as between mines. (2127) As to how equalizing the working time in the mines will persuade the surplus labor to quit and go elsewhere, just as soon as we have a car shortage the price immediately advances. That results in a starting up of every little mine in the country. In one district where it is highly organized, we haven't a first class blacksmith on the job. I do not recall just now what his wages are, but they average (2129) about seven and a half a day. The reason
we can not keep them is that the little fellow who starts
2275 up his mine under such circumstances offers them ten dollars a day. That means that we have to cast about and get the best we can in the way of blacksmiths to take the places vacated by the other men. We have to educate a new man until, in about six months, he is a fairly good blacksmith. The result is that we have two smiths now where we had one before, and we only needed one. That is an illustration.

By Commissioner AITCHISON:

Whenever we have that situation it brings these additional men in and those men become attached to and remain with the industry.

If we had not had those high prices that smith I referred to would have stayed with us. We have that same thing operating all along the line. There is not anything which can happen which is more disastrous to the capital legitimately invested in the coal business than to have a runaway market. A runaway market subdivides the work and transportation and dilutes the employment of coal miners and creates general havoc. (2130) On the other hand, if we could have maintained a general level of price and gone along, we could ultimately have gotten our mine costs down to a reasonable level. When we have a stiff market the railroad then comes to the commission and asks for an assigned car. That is a factor which further irritates a very bad situation.

By Mr. MARSHALL:

My idea is that eventually these wage scales will come down as the result of equalizing time. Everyone I talk to, representing the men, says, "If you give us regular work throughout the industry, of course, we can accept a lower scale." It is their annual pay they complain of, not the daily scale—$7.50 is the day scale for the miner, and the blacksmith is a little higher. (2131) I think that stabilization will result not only in decreased wages but will also deplete the unnecessary supply of labor. There will not be
2276 the attraction there is now. Assuming that there is just so much money to distribute upon the present scale, if there comes about a fairer distribution of this money, (2132) the effect would be of course to shut down a certain number of the mines. Those men will be readjusted among the other mines. The industry is overcrowded and there is only one way to get them out and that is to distribute the work evenly.

By Mr. BOYLE:

The railroads now store coal to a certain extent. My suggestion involves more extensive storage. If the railroads would use their equipment economically we never would have a coal-car shortage (2346) in this country. If the coal was put down just as soon as there was a car surplus we never would have occasion for an assigned car because we have no coal-car shortage. (2347) The trouble is that when these high prices prevail it dilutes (2347) every kind of transportation facility. It subdivides the effort of transpor-
2277 tation and it subdivides the locomotives and the cars. (2123) One of the most pernicious things it introduces is "pieces" at the mines. Take a locomotive which would ordinarily deliver 50 cars to a mine in the morning and go around in the evening and gather them up. Under the conditions I have been speaking of, if the locomotive delivers those 50 cars at the rate of two or three cars to a mine, it perhaps will not be able to gather more than 25 of the cars at night. The others will be standing under the tipples partially loaded.

By Commissioner AITCHISON:

They will pick up more cars the next ray if the mine works. But I have had pieces stand for two weeks this fall.

By Mr. BOYLE:

That was due to the fact that there was no (2347) car supply at that mine for that period. Our assignment is getting to be about a day and a half a week.

By Commissioner AITCHISON (2134):

There are certain sections of this country which are producing an abnormal tonnage right now that seems to have plenty of cars and locomotives. They always have plenty of miners everywhere. There are other sections of the country like southeastern Ohio, and carriers like the Chesapeake & Ohio and the Norfolk & Western in West Virginia where they are not getting anything like that. The Pennsylvania a good portion of the time this fall gave a hundred per cent car supply, but now their car supply is worse than it was. Central Pennsylvania is another section in which the production is well down, but there are other sections where there is an overproduction. If you would give all these mines a hundred per cent car supply over all the United States, every small mine and high-cost mine would be closed down within ten days or two weeks. Some
2278 mine operators make their money in times of car shortage, some do not. It depends altogether upon the conditions of the contracts. A man who has no contract obligations in times of car shortage gets the market price for his coal. (2135) Another man who has a commercial contract for a hundred per cent of his output only gets a mere percentage of the supply of the carrier, with the result that he loses money. The man who is legitimately in the coal business with a complete organization does not look forward to high prices with the expectation of making any money. He cannot because his car supply is cut down and he must of necessity lose money. But the man who has no contract obligations and who can sell his coal on a high-price market can of course make a great deal of money.

By Mr. BOYLE:

Our troubles are railroad troubles and coal operators' troubles. The miner is not responsible for them, and yet the miner is the one man who is going to apply the corrective, unless the railroad and the coal mine owner apply it. (2136) These men have been forced to the higher wages year after year by the railroad and the mine owner in the matter of distributing their work. These men now are threatening us with a six-hour bank-to-bank day of substantially a five-hour effective day. Our present contract with the United Mine Workers is upon basis of working six days a week and eight hours a day, or forty-eight hours work effective at the mine. The fault is that of the operators and the railroads in that we are not distributing the work among the men equally. As to wherein the inquiry here has anything to do with that, the assigned fuel car is the most potent factor in the situation.

By Mr. MARSHALL (2137):

I do not think you could get a railroad man to request an assigned car if he understood the inequities of it. We have all the rail-
2279 road cars necessary to fuel this country adequately. There is no occasion for having a shortage of fuel cars except that we misuse them. With respect to private cars (2138) there are some industries that use a good deal of coal and they can conceive that it would take care of their coal supply a little better if they owned their own coal mines. They bought their coal mines. They did not work the coal mines very long. They had consumption and they had production and found it necessary to supply the connecting link so they had to go in and buy privately owned cars. Those privately owned cars delivered to privately owned mines are causing just as much havoc in the business as the railroad cars. Anything that increases the work of one group of miners over their neighbors is the real trouble, the whole trouble.

By Commissioner AITCHISON (2139):

There is no other commodity that occurs to me now that is transported in any volume where the basis of distribution should be an equalization of the working time of those who are employed in the industry. (2142) As to preference in car supply, there is no question but what a continuous car supply at a given mine or mines reduces cost. I do not think that as a result of orders of the commission the coal industry as a whole has had a preference in the use of open-top cars in the last two or three years. Limestone did not have any preferential order, yet they got 94 per cent of the cars ordered in the same week in August when the coal-car supply was 78 per cent. (2144) The New York Central lines have three general coal (2348) producing sections. One section is in northern Pennsylvania, another in the Alliance section in Ohio. The other is the southern section, southern Ohio, which comprises the T. & O. C., the Z. & W., the Kanawha & Michigan. They make a division from the Fultonham division. For miscellaneous traffic the New
2280 Central gave substantially the following: (2145) For coal main line in the State of New York a hundred per cent supply; for coal supplied in the Alliance or northeastern Ohio division, more than a hundred per cent supply, empties being left over at the mines; for the divisions of Ohio, the K. & M., T. & O. C., and Z. & W., percentages varying from 15 to perhaps as high as 27 or 28. For coke, limestone, iron and steel, sandstone, and gravel they gave substantially a hundred per cent; that is, against the coal mines' 15 to 29 per cent. It is the same railroad, the same system. (2146) Those miscellaneous commodities were getting 82 and 99 and 87 per cent when coal was getting 57 per cent, notwithstanding the commission's order. A hundred per cent would have supplied the country with more coal than it could consume and the carriers could move.

By Mr. MARSHALL:

(2148) As to the suggested solution that distribution be made upon the basis of bona fide orders held by the mines, some orders are seasonal orders and some are just daily shipments.

By Commissioner AITCHISON:

It is oftentimes pretty hard to find out whether a mine has a bona fide order. I do not know of any business in which cancellations are so frequent, especially when the market begins to get filled up. (2149) I presume on that basis the coal operator would get a lot of wash orders. I have never heard of distributing it upon such a basis as that. The only coal we ship unbilled at all is the tidewater coal, but we have the orders, of course, in the background for it.

By Mr. BOYLE:

I assume there is a great deal of coal put on the rails without any specific destination and picked up and sold.

Cross-examination by Mr. BRONSON (2150):

2281 In 1921 along in April, and from them until (2151) just a short time prior to the strike of this year, we had advocated to the carriers that in order to avoid a strike this year it would be very desirable for them to put down at least a hundred million tons of coal. That coal was being offered to them at and below cost, around $1.50 and $1.70 to $2.00 a ton. They probably could have put down a hundred million tons last year for $175,000,000. If they had done that we would have had no strike in 1922, and the United Mine Workers would have accepted a reduction because it would have given them more work during the year 1921 when they were without employment. We had between 60 and 70 million tons in storage on the first day of April, 1922. The arriers had, my recollection is, something like 15 to 17 million tons of that in storage. If that had been supplemented by 80 million tons more of coal stored upon the part of the carriers, so that the country (2348) would have had 150 million tons of coal in storage, there would have been no strike. (2152) I do not charge the strike all to the carriers. If a mine works six days a week the majority of the men work six days a week. (2153) If there is a commercial mine working four days a week, with car supply from 50 to 60 per cent, and a fuel mine working six days a week, some of the men working at the commercial mine will seek work at the fuel mine. As to how many, that depends upon the character of the men. The average loader aims to work more than four days a week. (2154) The legitimate coal miner wants to work six days a week if there is work in the neighborhood, and he is not very firmly attached to a mine; he will follow the best of the work. I have no idea how many private coal cars there are in use in the United States. I think there are something like 940,000 railway fuel open top cars in the United States. The percentage of the railway owned cars the railroads use for fuel purposes depends

on how they use them. One road will accumulate 30 days car
2282 supply on wheels if it has the car supply. (2155) Others will accumulate two weeks supply. It takes about ten thousand a day to fuel the railroads of the United States. The number of days those cars are in use depends altogether upon the carrier. A carrier close by the mines does not use so many and the carrier that is further removed takes more in transit and carriers a higher amount of tons of fuel on hand. Railroads are more apt in times of car shortage to hold coal for railroad use than at any other time and to hold it as much as three or four weeks, and I think more than that.

By Mr. GUTHEIM:

I mean on wheels. I am giving my opinion. That is the time they really desire to accumulate coal, because with winter coming on—and it is usually in the fall and winter months that they ask for an assigned-car supply—the average railroad manager (2156) who is provident wants to accumulate as much of a coal-car supply as he can. (2157) My idea is that the railroads will store their coal ultimately. I think the railroads could save, for instance, on their coal supply this year more than an average of $1 a ton had they stored their coal last year and used it this year. (2158) I think they can make a saving of over a dollar a ton on railroad fuel coal. I think if you would withdraw the use of assigned cars so that the average provident railroad manager feels that now he has to take care of his coal just as he has to take care of other supplies, he would reduce the fuel bill of the American people more than five hundred million a year. My thought is that a man should buy goods as an average merchant buys goods, on a low market, and put them in storage, and I would expect the railroad to use just the same business sense. The price is too high now for storage. Next year we
2283 are going back to low prices unless we should be unfortunate enough to draw a strike on the first of April. (2159) Next year the railroads of this country can store 150 or 200 million tons of coal and save a great deal of money because they can buy every ton of that coal at less than cost. My idea is that the railroads should store all their coal to take care of their needs during car shortage periods. A railroad car that is used to-day for transporting railroad fuel is taken out of revenue service very largely. Suppose they had that coal in storage and had that car free and the public was asking for the use of the car, the public would pay revenue for it. The carrier would not have to use its cars to carry the coal from the pile to the engine tender. Every carrier has sufficient obselete cars for that purpose which it cannot put in trains to move coal. The Hocking Valley, one of the subsidiaries of the C. & O., have about 4,000 cars, some of which I think they sold recently. They are not safe to put in with 100-ton equipment or 70-ton equipment in the train because they would crumple up, but they would be safe to carry coal from storage to the points of use. (2161) When you put a revenue-producing car into railroad fuel use it means you have

got to send it all the way to the mine and bring it back. The railroad-owned mine is just as much a menace to the prosperity of the American bituminous coal industry—more so, in fact—than the privately owned mine if that mine be given a preferential supply. I am interested in the Birchton mine, with the Sarita on one side and the Dorothy and Eunice on the other. (2162) So long as you maintain equal work at the mines the miner will not change. If you run a commercial mine ahead of the railroad mine they will come to the commercial mine, and if you run the railroad mine ahead of the commercial mine, the miner will transfer. (2348) I believe that any preferential work at a coal mine over a neighboring mine
2284 tends to increase the cost of the coal to the American public (2163) whether it be a railroad mine or a privately owned mine, so long as it gets better transportation facilities. There is no question that if all cars are actually prorated, wages, and thereby the price of coal, will ultimately come down. As to the situation on the C. & O., if you assign cars to one mine so that you run that mine ahead, whether it be upon the C. & O. or the Illinois Central, or any other railroad, it will disturb your labor conditions. (2164) As to the C. & O. situation, I discussed that with the president of that railroad and said I believed he was working a great injustice upon himself and his own company by attempting to produce coal in that way in one group of mines. It is not the miner employed at the railroad fuel assigned car mine or the privately owned mine that fixes the wage scale. It is fixed by the men working at the commercial mines. If by any process you reduce the working time and the wage scale of the workman at the commercial mine so that his annual income is insufficient to take care of his needs, he is going to ask you for an increase in wages. The commercial miner has seven or eight votes in convention, because they vote by mines, to the two or three votes of the other. The result is that we are asked to increase our scale of wages. (2165) The miners stay at the bituminous mines because they think they can force a higher wage. They have been pretty successful for the last 18 years. There is another difficulty that is attracting to the bituminous mines a lot of men that do not want to work full time, that is, a lot of these farmer miners, men that come from other industries, the mal-contents that come to the bituminous mines. But your legitimate miner, your English miner, your American miner is just as anxious to increase his
2285 income by working every day as a good citizen in any other line of industry. It is these mal-contents that the high wages attract to the mines that are the source of a great deal of our troubles. (2166) It is a false premise to assume that the carriers can not store coal, because coal is stored throughout the world; it is stored for several years even at the tropics. Every naval base in the world carries a supply of coal and under conditions in which the loss through volatilization (2167) or slow combustion is greater than under conditions here in our temperate zone. If a carrier instead

of buying its coal at a few mines, taking the entire output, distributes its requirements among say all the mines that produce the kind of coal that it can use, this would not necessarily result in a waste of transportation to the injury of commercial transportation because the carrier serves all these mines anyway. These commercial mines run some of the time and you are going to have to deliver a certain number of cars to them anyway. If you deliver a greater number of cars to that commercial mine and a lesser number of cars to your railroad fuel mine, your railroad fuel only represents less than one-third and is not going to change your ratio of cost. (2168) The Dorothy, Sarita, and Eunice mines, on the C. & O., are up at the head of the Clear Fork of Coal River division. (2348) You have got to haul those cars from Huntington, we will say, to fuel them with coal. If you will stop at any place within a hundred miles of Huntington you could get your coal cheaper so far as transportation is concerned. If the C. & O. distributed those cars right along that division it would have to stop at those mines anyway because it has got to go to the farthest mine up. Sarita is the farthest mine with the exception of one, the American Eagle. It may be true that lots of times certain of those mines do not call for any transportation,

but the C. & O. hauls all its fuel cars all the while to the ex-
2286 treme end of its line. (2168–2348) (2169) As to the feasi-

bility of buying railway fuel coal without overcontracting (2170), if the railroads would buy their coal at timely opportunities, they would buy it always cheaper than they could possibly produce it; and then when it came to a time of car shortage when the price of coal was high they would not be compelled to take on a pound of coal. The railroads ought to keep out of the market whenever the market is high and use their transportation for revenue purposes at that time. That is the economical use of the coal car.

By Mr. BOYLE:

That would bring down every price, and especially coal. There are not times when railroads have got to get their coal quickly. I burn between 125 and 150 thousand tons of coal myself through industries that I am connected with. We do not buy high-priced coal. We put it on the ground when it is cheap. I am not recommending anything to others but what I am willing to do myself. We find it economical. The railroad will find it economical. (2171) It is customary to try to contract for coal from April first to the next April. As to the experience of the Chesapeake & Ohio in 1920, they should have taken the coal in 1919 when it could have been bought at less than cost. We do not have these high coal prices that maintained for any certain period of time. As I have testified, in 87 of the last 130 months, you have had car surpluses. The time to buy railroad coal and to buy it most economically is during surplus of cars.

By Commissioner AITCHISON:

The railroad will not have to put in an order. The operators will fall over themselves to give him the coal and to give it to him at less than cost. I have never seen it fail.

By Mr. MARSHALL:

The public will ultimately of necessity bear the loss. But it
2287 is less of a loss the public has to pay, by reason of the fact that the mine is kept running. There is not anything more expensive than to keep a mine running one day a week or two days a week. You have got to pump water and to ventilate (2348) seven days a week and keep your men there every day of the week.

By Mr. GUTHEIM (2173):

Our experience on the C. & O. has been that we have been getting in recent weeks about one day one week and about two days the next week. On the New York Central I think we have been getting a little better time than that part of the time, and part of the time we have made a little worst. The amount of coal carriers store on wheels varies at various times. You ask a railroad man to-day and he will say, "I have two weeks' supply." Another day the same man will say, "I have six weeks' supply." I think they never fall under two weeks. I do not mean (2174) that they always have two weeks at the point of consumption, but what they have between the point of production and what they have rolling and what they have on hand, I think, always exceed two weeks. My attention has just been called to the fact that at one of our mines we had three weeks supply of Erie fuel within two miles of the mine. That was in September, 1922. It makes a difference whether you store coal of one mine in a pile or the coal of several mines in a pile. (2175) We handled coal up the lakes recently. During the war period and since we have been obliged to pool that lake coal; we handle a good bit of it from various sections. It is not satisfactory to the purchaser of lake coal as though he got his coal from a particular mine. Some of the lake dock owners have bought particular mines in order to get that coal, but they complain they could not get a car of that coal. They probably got it from 40 or 50 different mines. I store coal from a number of mines. For instance, a storage pile that I have experience with is right at South Columbus. Probably every
2288 mine in the district ships coal into that pile, and there is probably not less than 50 to a hundred thousand tons of storage coal there; sometimes three or four times that amount (2176) Our customary lake shipments, with the exception of the No. 8 district in eastern Ohio, are more or less screened and refined. During the war period the coal was not screened; a run of mine coal was sent to the lakes, and the indiscriminate mixing will cause certain firing. But that is not always true. For instance, spontaneous combustion (2177) causes firing in a pile of coal that does not contain as much as a bushel at times, if you get a sufficient

amount of sulphur in the bottom of the pile. (2178) For 15 or 18 years we have had a constant increase in the mining scale. I think the most potent influence in the increase is the unequal distribution of work and the consequent dissatisfaction of a very large percentage of the workmen. I think that is accentuated by the assigned fuel car more than any other one factor.

By Mr. BRONSON (2179):

As to the necessity of storing separately for stoker engines and hand-firing engines, they could store together, but they would have to load separately. You would have to keep your coal entirely separate and distinct, but they crush mine run. Some of the locomotives take mine run regularly and crush it with crushers on the locomotive.

By Mr. YOUNGER:

Natural storage is the most economical storage of coal. Store the coal in the ground until you want to use it. I said the C. & O. had mines on every division, but they have a good deal of territory; for instance, the Ohio division where they have probably 175 miles with no mines. I would store coal along that division. I would store coal along their Indiana division. I would store coal on both
2289 the C. & O. and Norfolk & Western. They run a long distance between where they leave the smokeless district to Tidewater. They ought to store coal along that district. The Norfolk & Western should have storage on their east end and their west end. (2181) I think it would work out economically to have storage points on divisions where mines are located. You could probably have elevation storage right there. We had the same thing at the mines on the Chesapeake & Ohio. We put in storage at the mine and would let a car go forward to avoid having a piece. The road could do exactly the same thing we did. They could probably get gravity storage at many of their junction points.

By Mr. BOYLE (2183):

I have a document which is the award and recommendation of the United States Bituminous Coal Commission. I refer to page 58, paragraph No. 8, of this document.

(The paragraph referred to was introduced into the record by reference without being read.)

By Hon. SAMUEL ALSCHULER:

When the Cleveland wage scale was signed in August this year the non-union fields were working considerably below that scale, and in order to hold their men they immediately advanced their wages up to or perhaps a little, in some cases, above the Cleveland wage scale. So that there is more or less of an inter-relationship between the non-union and union districts at all times. The union (2348) district, however, is held to a scale for a period by reason of a contract having been executed between the two parties. In the non-

union district they do not have a contract for a specified time. If work gets dull it is generally customary (2185) for them to re-adjust their wage scales in order to move their product. That in turn has a bad effect on the work of the miners in the union districts that are held to a contract. They cannot reduce their cost to meet the other cost.

2290 As to whether railroads secure coal from non-union mines, the Dorothy, Sarita, and Eunice mines of the Chesapeake & Ohio are probably non-union. The two mines that were referred to in the Logan district are non-union, and the mines supplying the Norfolk & Western just south are practically all throughout that entire system non-union. Fuel coal is taken from those mines. Not only the roads upon which the mines are located, but this entire southeastern system of railways along the coastal plane of the United States, and the Southern Railway, are generally supplied with fuel from non-union mines. Across the Ohio River on the north there are few of the railroads that rely on these non-union districts for fuel coal, I think largely due to the fact that they not only have the cost of coal f. o. b. the mine, but they have a long transportation charge which is added, so they prefer to pay the higher rate per ton for union coal (2349) with the shorter transportation charge. (2186) A good many of the New England roads are supplied by coal that is shipped in cars to tidewater and then transferred to New York and New England, generally by coastwise vessel movements.

By Mr. MARSHALL:

The coal generally loaded at Hampton Roads is non-union, and a considerable portion of the coal loaded at Baltimore and Philadelphia is non-union, from central Pennsylvania. However, there are less of those mines in central Pennsylvania that are non-union mines than were non-union a year or two years ago.

Car Service Bulletin No. 57, dated November 16, 1922, of American Railway Association, was offered and received in evidence as Exhibit No. 83.

By Commissioner Cox (2187):

If carriers, industries, and utilities contracted in advance, sometimes they would get a lower price and sometimes they would not. Such an arrangement would tend to stabilize the coal

2291 industry, but in any event there ought to be certain storages. I think that the carrier can better store its coal and more economically and with greater benefit to the whole than any other consumer. (2349) They can put their coal down more cheaply and take it up more cheaply, and they do not always have to pay the full tariff. (2188) Consequently there is not so much money involved in carrier's storage per ton of coal as there is in private industry. The one person who should never be called upon to supply his coal in storage is the householder. He suffers the highest price

per ton and he ought never be asked to do that, because that ties up more of the capital of the country than the storage of coal for any other class of consumption. In my reference to assigned cars I do not mean to say that they are mis-used, that cars are checked at my mine and hauled for some other purpose. (2189) I do not do it. As to what everybody else does, I do not know.

A statement filed by the Louisville & Nashville, as requested by the commission, was offered and received in evidence as Exhibit No. 84. (2190)

JOHN CALLAHAN, recalled as a witness, testified further as follows:

Direct examination:

(Statement entitled "Code of mine rating and car distribution rules proposed by the National Coal Association" was offered and received in evidence as Exhibit No. 85.)

By Commissioner AITCHISON:

This exhibit is based on Exhibit 1, and simply includes the changes which we are proposing to make in the rules.

By Mr. BALLARD (2192):

I have been closely associated with the development of the code now in use from the time it was first adopted for universal application. This includes participation in numerous conferences which have been held from time to time between the carriers and
2292 coal shippers on this subject. I have authority to state the position of the National Coal Association with respect to the proposed code of rules and the particular rules to which I have proposed changes. It is the desire of this association that these rules when they have received the commission's approval shall be filed as tariffs; furthermore, the National Coal Association (2193) is committed to the principle of the use of the code of rules which shall be applied universally so far as possible.

(A statement headed, "Illustrations of purpose of changes proposed to be made in rule C of CS-31, revised," in respect to mine rating, was offered and received in evidence as Exhibit No. 86.) (2219)

(A form of bulletin of mine rating and car distribution information to be supplied operators was offered and received in evidence as Exhibit No. 87.) (2220)

I have also an exhibit prepared to illustrate the use of this form.

(The statement referred to was offered and received in evidence as Exhibit No. 88.) (2221)

(2223) Passing to rule 5 [relating to distribution], it is our recommendation that the following words be added at the end of rule 5 as it is now set forth: "Provided that flat bottomed gondola cars with size thirty-six inches or less in heighth, inside measurement, shall be charged at actual weight of load." In connection with that I have prepared a statement showing the impossibility of loading certain types of gondolas to their physical capacity.

(The statement referred to was offered and received in evidence as Exhibit No. 89.) (2224)

The practice in connection with charging box cars to coal mines has varied in many districts. After lengthy discussion of this
2293 subject by committees for giving consideration to these rules, we recommend that box cars when ordered be charged at 25 tons per car. (2225)

By Commissioner AITCHISON:

What we were endeavoring to avoid by the use of the words "when ordered," was an unnecessary placement of box cars by the carrier when a shipper did not want those cars and was not in a position to load them.

By Mr. BALLARD:

If a box car was placed without order and accepted and loaded I thing it ought to be charged the same as any other car. The language ought to be changed to take that into consideration. (2226)

By Mr. BRONSON:

The 25 tons is an arbitrary figure which we arrived at after a great deal of discussion. It is probably an average of what you could get in most box cars convenient to the shipper and to the consignee. If you would attempt to put more than that in on an average it would result in a very slow loading process and also a very slow unloading process.

2294 (2236) I do not want to say how private cars should be treated here. We are not testifying about private cars.

D. E. SPANGLER, recalled as a witness, testified further as follows (2253):

Direct examination by Mr. RIVINUS (2259):

The Norfolk & Western would prefer now to restore its own former system of mine ratings on a capacity and performance basis, resume its former administrative authority, policies, and practices, and accept full responsibility for the results. Our plan is described in detail in a document which I have.

The document referred to was offered and received in evidence as Exhibit No. 90. (2260)

DEC. 13, 1922.

(2277) (In response to a request made by the commission and by the National Coal Association and others, a statement showing the percentage of total cars loaded to rating, divided as between assigned cars and commercial cars, on the M. K. & T., for the period beginning October 2 and continuing until October 31, 1922, was offered and received in evidence as Exhibit No. 91.)

(Similar statements in respect to the Virginian Railway, St. Louis-San Francisco Railroad, Norfolk & Western Railroad, Louisville & Nashville Railroad, Chicago, Rock Island & Pacific System, South-

ern Railway System, Illinois Central Railroad, Chicago, Milwaukee & St. Paul Railway, Chicago, Milwaukee & St. Paul, C. T. H. & S. E. division, and Chicago, Burlington & Quincy were offered and received in evidence as Exhibits No. 92, 93, 94, 95, 96, 97, 98, 99, 100, and 101, respectively.)

AUGUST G. GUTHEIM was recalled as a witness in rebuttal and testified further as follows (2280):

2295 Direct examination by Mr. FLETCHER (2281):

I have here four exhibits as a foundation for my testimony. The first one, No. 102, is designed to show the extent to which the assigned car rules and assigned car practices were in vogue in October, 1922, on class 1 railroads and bituminous coal loading railroads not included in class 1. (2282) Exhibit No. 103 shows the condition of car supply, the actual loading of bituminous coal, and the potential production of bituminous coal mines, and also the percentage of full time which those mines have worked throughout the years 1917 to 1922, which is the entire period for which those records are available. The information concerning the per cent of cars furnished to cars required and cars furnished to cars loaded is current information reported week by week by the car service division of the American Association and becomes the basis of the Geological Survey's weekly reports of coal production. The tonnage produced which is loaded in railroad cars is merely a deduction from cars loaded on a 50-ton basis. The percentage of full time worked by mines is the figure (2283) which is reported weekly by the United States Geological Survey. This particular information was not reported by the survey at all until the week of September 22, 1917. The survey then omitted it because it was practically meaningless during the miners' strike in 1919, and it has been omitted again during the miners' strike of 1922, and since the strike the survey has not shown the information for the country as a whole, although it shows it for the individual districts. From that percentage of full time worked and the total production of bituminous coal as reported by the survey weekly there has been deduced the potential capacity of the mines, and that is shown in column 9. Column 10 shows the approximate tonnage of bituminous coal produced which is not loaded in railroad cars. (2284) Before July 8, 1922, there were appar-
2296 ently more cars furnished than were required, and from that time on there began to be a car shortage as indicated by these figures. At a time when we had a car supply of 126 per cent, which was March 25, 1922, the production was 11,448,000 tons. (2285) At a time when we had a car supply of 53 per cent, namely, the week of November 25, 1922, we had a production of 11,038,000 tons, and approximately as much coal was produced with a 53 per cent car supply as a 126 per cent car supply. That is not only true but in February and March, 1922, for example, the production ran ten and eleven millions tons a week with 122 to 126 per cent car supply in those weeks, whereas, in October and November, 1922, the pro-

duction again ran 10 and 11 million tons a week with a car supply of 52 to 55 per cent. The difference is accounted for by the fact that the cars required in February and March ran to a maximum of 236,471 in the week ending March 25. In October and November they ran to a maximum of 429,809 cars in the week of November 25. (2286) While the cars furnished in October and November are less than what they were in February and March, if the excess above 100 per cent furnished in February and March be deducted from the total then furnished, the performance in October and November will compare favorably with what was furnished in February and March. (2287)

The next Exhibit, No. 104, is a compilation of an annual record of the car service division. (2288) From the last column on page 2 it will be seen that on January 1, 1916, the grand total rating was 43,987 for mines, 3,669 in number. That was before the day of the so-called uniform mine rating and coal car distribution rules which became effective on October 10, 1918. On January 1, 1918, the last preceding record, the exhibit shows there were 6,231 mines with a total rated capacity of 60,351 cars. Three months after
2297–2298 the first C. S. 31 circular went into effect the record shows for 6,916 mines, or about a 10 per cent increase in the number of mines, a total rating of 43,794 cars, or a reduction in the ratings of about 25 per cent. The number of mines that are asking for service from the railroads since that time is shown on the last available date, namely, January 1, 1921, as 8,722 mines with a rating of [6]2,739 cars. (2289)

2299 (2289) The record for January 1, 1922, was not obtained, I believe, for economy reasons. On September 12, 1922, the car service division sent out a request for the data, but asked only for the rating, and that shows 68,919 cars as the total ratings on that date. This, on a daily basis and on six days a week, would give you about 410,000 cars as the total weekly rating, Sept. 12, 1922, which was within the time when the mines were still getting over the effects of the strike. I surmise that 410,000 may be compared with the maximum orders in the week of November 25, more than two months later, of 429,000 cars.

By Commissioner ATCHISON:

As to the aggregate mine rating at the present time on a weekly basis, it figures out 21,490,000 tons in that last week, which runs you up close to 1,100,000,000 tons of coal per annum, on which they ask cars.

By Mr. FLETCHER:

The next exhibit, No. 105, covers all that I have been able to dig out to get something concrete on the subject of railroad fuel costs (2290), and I found it in two statements that Mr. J. D. A. Morrow, the executive vice president of the National Coal Association, submitted to the commission in connection with his statement on coal rates in Reduced Rates, 1922; and Mr. Morrow in these exhibits

shows, for a considerable tonnage of coal produced in the months January to October, 1921, the total production, the total f. o. b. realization at the mines, the average realization per ton, and the cost of production and the margin. At the same time he showed, for two months, the average f. o. b. mine cost of railroad fuel; and, of the two months that he showed, one, October 1921, is included also in his first page of realization for all coal at the mines, and
2300 the significance of it is that with a total realization for all coal in October of $2.73 a ton, or a margin of 14 cents over cost, the railroads in the same months for their contract coal paid $3.12, for their spot coal, $2.48, and for all coal, $2.98; the contract and spot being, relatively, about two-thirds and one-third of the total; and on that account I want to point out that October, 1921, was a month of full car supply, as was the entire year 1921, when the effect of the assigned car was negligible.

By Commissioner AITCHISON (2291):

As to whether the figures showing cost of railroad fuel include freight, the cost is shown in Mr. Morrow's exhibit as the f. o. b. mine cost of railroad fuel.

(The four statements above referred to were offered and received in evidence as Exhibits 102, 103, 104, and 105.)

By Mr. FLETCHER:

As to use by railroads of preferential contracts in securing fuel without assigned cars, (2292) these preferential contracts were first brought to my attention two years ago last April, when, at the instance of the commission, the American Railway Association and the National Coal Association, through committees, met and tried to settle this problem between themselves. At that time one of the suggestions made by the coal operators was that, if the railroads would refrain from using the assigned car, they could get all the coal they wanted on so-called preferential contracts. There were on the railroad committee in that conference five operating men and five purchasing men from throughout the country: two or three of them from the territory Chicago, St. Louis, and the South and West. I was unable to find out from those men that the so-called preferential contract had ever been used to any considerable extent, or, in
2301 fact, at all; and we asked the coal operators to name the railroads that had utilized the so-called preferential contract, and we got no more concrete information than has been given in this record. Since the last hearing closed, in conjunction with Judge Fletcher we have made inquiry of a number of railroads, and certainly all of the large railroads in that territory, and we are unable to find that that practice has ever had any general application. We were told, in the case of the Burlington, that at one time they did have such contracts (2293) and that the contracts had not produced coal when the time came when there was a coal shortage, in consequence of which the operators making the contracts came to the rail-

roads and begged to be excused, so that they could keep themselves in good standing with the commercial trade. The upshot of the Burlington's experience indicated to them that they did not buy much more than a lawsuit when they tried to buy coal on those contracts. The Santa Fe stated that they do not have and never had in the past any such contracts. The Missouri Pacific has made a similar statement; that the company is not now and was not a party to any contracts of that sort. I believe that the C. & O. has had some experience along that line, similar to that of the Burlington.

By Mr. BROWN:

The Southern Railway Company will have an exhibit on the matter of preferential contracts. I have enquired of the Big Four, and they say that they do not know what the E. & I. did before they got the E. & I. property (2294), but they do say, what is notorious among railroad men, that the E. & I. was in a pretty sorry condition as to car supply.

2302 (2294) It was a bankrupt property, and it assumed that the operators, in the condition of car supply in which they found themselves on that bankrupt railroad, were probably very glad to keep their business at home, if they could possibly do so. The Big Four also at the present time, I know, is buying its own coal on assigned-car contracts, not only on its own line but on the Baltimore & Ohio, the Chesapeake & Ohio, and, I believe, on the Louisville & Nashville.

By Mr. FLETCHER:

My opinion is that the idle-hour system has involved the use of assigned cars, the only difference between the situation there and here being that, if a railroad shipped commercial coal at all and also shipped railroad fuel (2295), the time that was utilized in loading railroad fuel was counted as time worked in computing the idle time on which it was entitled to get cars. But if the railroad bought coal on a full output contract for a definite time the mine was given all the cars that were necessary with which to load coal on that contract, and its extra running time was not counted against it in any way. As to whether the use of the assigned car for railroad fuel did not prevent confiscation, in 1920 when Federal control terminated there were not and had not been for months any assigned cars for the protection of railroad fuel loading. There had been a Government distribution of coal through the Central Coal Committee acting as the Fuel Administrator's agent. The period for making coal contracts was April 1, and there (2296) was no arrangement that warranted the making of contracts on an assigned-car basis prior to the time of the usual contract term. The strike of the switchmen began, I believe, on April 6, 1920; and the commission authorized the use of the assigned car on April 15, 1920. My experience has been that that

combination of circumstances made it impossible for the
2303 railroads to buy their coal either on an assigned car or no assigned car basis; and the fact that the assigned car was available after April 15, 1920, did not in any way avoid confiscation, because it was not the fact that the availability of the assigned car was here, but rather the fact that the contracts had not been made, because they could not be made previously; and it was that which produced the confiscation that year. It was, rather, because there were no contracts at all than otherwise. As to the practicability of supplying the railroad's needs by emergency orders of the commission, if assigned cars are prohibited, my experience on that would indicate that, while the commission's order might be helpful, if it were sufficiently flexible (2297), in the event that the railroad had its coal bought, it probably would not be helpful if the railroad did not have its coal bought. In other words, if you had a duplication of the 1920 situation, where a large part of the coal was not bought, the authorization for the assignment of cars subsequently would not produce the coal. It would depend entirely upon the state of the railroad's contract with the fuel-producing agencies. I would not like to see the commission saddled with going into the necessity of any more protection of coal distribution than is absolutely necessary. I have taken it for granted that that is what everybody wants to get away from. With respect to Mr. Callahan's Exhibits 33, 34, and 35, dealing with the extent to which assigned car and nonassigned car mines vary in percentages, I assume that they indicate the situation that Mr. Callahan found at those mines; but I do not take it (2298) that any 1920 figures are really indicative of the situation that can normally be expected. Especially in 1920 you had the fact that car supply was forced. Car supply was forced into the lake regions for the purpose of meeting up with the necessities of Service Order No. 10. The railroads deliberately put more cars, at a time when the car supply was short, into the
2304 lake loading territory, because there was a requirement of the railroads of so many cars per day to be loaded to the Lakes, and it took some time to get the railroads up to that performance. That of necessity disrupted the balance of distribution as between districts. Then, there were orders which the commission issued for the assignment of cars for public utility loading, and I believe that there was some New England loading for a while that was covered, but not by the assigned car. All of that tended to disrupt the usual relation between the mines and between the districts. That would have its effect on the percentage of car distribution and on the percentage of full-time work, both of which elements were covered in Mr. Callahan's three exhibits. (2299) My understanding has been that your nonassigned car mine will have a greater inflation than the assigned car mine, working regularly. That would have effect upon the exhibit also, because that was the basis upon which it was figured. With reference to some testimony and suggestions here that the railroads have been using assigned cars to depress the price

unduly, well, I think we might as well look the situation in the face——

By Commissioner AITCHISON:

I will say that all I know about this is general knowledge which I have obtained in handling the situation throughout that period. (2300) People would come and ask for assistance of different sorts. They would lay their cards on the table; and in that way I acquired a general knowledge of it. I do not claim ever to have purchased any coal for a railroad or to have been a factor in making coal negotiations. The situation comes down to this: That if you can make your contract with assigned car mines you make it with people who solicit the business, as has been testified to; and
2305 in the ordinary period and under normal conditions the contracts are made for a definite term, and the business runs along and the coal comes forth in a normal way. When you get to the point where you cannot buy your coal in—where you haven't got your coal covered in assigned cars and you have to buy it, then you are always in a position where you are buying on a rapidly rising market. Now, it makes no difference whether at that time you buy it lower than the commercial market or at the commercial market; you will find that in a year of that sort your price of railroad fuel coal always runs way up. I think the best illustration of that is the commission's own report in answering Senator Nelson's resolution with respect to railway fuel prices in 1920. (2301)

Mr. FLETCHER. I should like to have it understood that that report will be considered as in evidence. It is a public document.

Commissioner AITCHISON. That may be done.

By Mr. FLETCHER:

As to storage of coal by railroads, my recollection is that Mr. Poston said that the railroads should be required to store a considerable volume of their needs, and I believe he said that he thought they should store an eighteen months' consumption. Now, eighteen months' consumption would run upwards of 200,000,000 tons; and I have made inquiries among railroad men with respect to that situation as they see it. First, I asked particularly with respect to the New England roads, and then they merely suggested that I cast my eye over what the experience of the last several years has been. (2302) With the tremendous demand for fuel in 1916 and the tremendous car shortage, there was little opportunity to build up
stocks. The same was even more true in 1917, with the
2306 accentuation of the war demand. In 1918 we had a similar situation. In 1919 we had a bad period from July on; and we had the strike of the miners beginning November 1. We do not have to say anything about the inability to store up large volumes of coal in 1920; and in 1921 that was probably the first year when you could get back to a period when you might talk of economically buying a large volume of coal ahead. In that year there was produced, I believe, about 410,000,000 tons. The New England roads

say that at no time in those years have they been able to accumulate the relative storage that they did previously, and they also say that it would be their purpose to go back to former practices in that connection; but there has been no opportunity. The administration did not do it, and the properties were handed back to the carriers, and they had no opportunity to do it in 1920. There was no trouble in 1921; and in 1922 there has been no opportunity to do it. As to Mr. Poston's statement about the eighteen months, I would like to talk for a moment about the Pennsylvania. (2303) A 20,000,000-ton annual consumption on the Pennsylvania varies between July and January, as much as 50 per cent more in January than is consumed in July. Coal is stored—and I have seen the prospective plans and gone over them and have been given these figures—coal is stored in a pile approximately 1,150 feet long, 310 feet wide, and 25 feet high, built so that it can be unloaded from movable tracks and the tracks moved out as the coal comes further and further out to the edge of the pile; and it would run about 175 tons to the linear foot. On that basis to store a year and one-half's requirement of coal on the Pennsylvania Railroad would require a pile about 310 feet wide and 25 feet high, running for something like 32 miles plus.

That would be quite a pile of coal, and that is one railroad.

2307 (2304) Based on those dimensions of 1,150 feet long, 310 feet wide, and 25 feet high, you would have in that pile only 190,000 tons. So you can estimate the number of piles it would take to cover a situation on that one railroad. And, when you bear in mind that by far the greater volume of coal is consumed there in the central region and in the region between Harrisburg and New York, you can get some idea of where you would take care of that storage. Those plans were very accurately worked out, but the piles were not built.

By Commissioner ATTCHISON:

My recollection is that Mr. Northcutt, of the Louisville & Nashville, figured that the weight of bituminous coal was about 55 pounds per cubic foot.

By Mr. FLETCHER:

(2305) I know Pittsburgh pretty well, and it is very hard to find any acres of vacant ground around there for the purpose of storage. As to whether railroads are now storing about as much coal as practicable, I will say, as I have said before, that your railroad storage, as a general proposition, runs along with your utility storage and that you find greater storage on the non-coal-producing railroads, and that you find more in Canada, as a rule, than you find in New England and the Northwest and more in New England and the Northwest than you find in the South. With reference to certain testimony by Mr. P. H. Watkins with respect to railroads obtaining their coal during the time when assigned cars were not used in 1917 and 1918, Mr. Watkins (2306) was a prominent factor

in this situation during the war period—to my knowledge from the summer of 1917 on—and at that time many of the eastern railroads were in serious difficulties with respect to fuel coal. I believe there were several which had not been able to buy 50 per cent of their
2308 requirements; and Mr. Watkins was down here with Commissioner Clark, through whom I met him, endeavoring to get coal for the railroads without assigned cars, especially without assigned cars for short periods, which was practiced because of the situation in which they were. It was through Mr. Watkins that we finally got together with Dr. Garfield a month or two after he began to function here; and we wrote out, in conjunction with him and one or two other operators in the commission on car service, the orders which Dr. Garfield finally signed which assessed upon all the mines on a coal-producing railroad the deficiency of coal for which it had not been able to contract. I believe the first of those orders was for the Pennsylvania, and they made them for the Baltimore & Ohio, the Chesapeake & Ohio, the Seaboard, the Coast Line, some of the New England roads, and coal was obtained in that way. It got coal, when it was taking coal from every mine on the railroad (2307), assembling it in small lots of various grades and qualities and using it for locomotive fuel purposes; and, as a hearsay statement, I will say that there is more than one railroad motive power man who attributes the failures of his operation in the winter of 1917 and 1918 to coal procured in that way more than to anything else. Now, it was a makeshift. It got the coal, and it got the coal without the assignment of cars. There is no question about that at all. But it continued in that way until we reached a period when a freer car supply began to develop in 1918. It is true that after all assigned cars were abolished in June and early July, 1918, there was an easy time on railroad fuel; but by referring to the reports of the Geological Survey for that period you will find that the loss of time on account of no cars was running quite uniformly under 10 per cent, which bears out Mr. Callahan's statement in his testimony that after April, 1918,
2309 the coal-car shortage that year was practically negligible. And it is no trick to handle railroad fuel without assigned cars with a substantially full car supply, and that is what the Railroad Administration was doing. There was no trouble from the summer of 1918 until we got into the shop-craft strike in the summer of 1919. (2308) By that time Mr. Watkins was no longer a factor in it; but at that time there were no assigned cars. The Director General ruled that we must adhere to the President's ruling on that point, and the way we got coal that year was by strong-arming the proposition to the point of saying that if the mine had a railroad fuel contract and refused to ship on it we would not furnish commercial coal until we got the full requirements of railroad fuel. A 50 per cent car supply to-day based upon the present ratings is producing about 11,000,000 tons of coal a week. That is about 550,000,000 more tons a year, more coal than the United States ever consumed for one year.

Cross-examination by Mr. BROWN:

(2309) Referring to Exhibit No. 105, it shows that the railroad purchased its spot coal in October, 1921, lower than cost, that being a car surplus period. There is a difference between the average price per ton in that month and the spot price; but that is a time when your coal man was running to the market.

By Commissioner AITCHISON:

I could not say whether spot coal is the same as contract coal, but I assume it would run about the same as this spot coal, being all railroad coal.

By Mr. BROWN:

(2310) I have not checked up Mr. Poston's figures as to 87 months of full car supply and 43 months of short car supply
2310 in the last 130 months; but if you talk about 130 months, which is substantially 11 years, you will find 99.44 per cent of all the car shortage months in the last six years. And that is the period I have been testifying about here. As to whether in normal car shortage period the ratio of shortage is as 87 to 43, my answer is no. I testified in my statement last July that, taking it over a term of years, you would not find a nation-wide car shortage 10 per cent of the time; that you would find local and seasonable car shortages practically every year. The Colorado field is an instance of that. Colorado coal is largely a domestic proposition, outside of railroad fuel. The domestic consumer of bituminous coal does not load his cellar up in summer. The result of that is that they get into a car shortage period in Colorado along about September of each year, and they will have more trouble in September, October, and November, and about that time the edge goes off. (2312) I do not agree that during the last six years covered by this statement here you ever saw the time, except for the first few months of 1919 and for the year 1921, when there was a free enough market to warrant going in and buying coal to store.

By Commissioner AITCHISON:

(2313) The Hocking Valley case, I think, was decided in 1906, and the Traer case in 1907, with reference to the big car shortage that wound up with the panic of 1906 and 1907—not the panic, but the car shortage which the commission investigated, and Commissioner Lane's report was about that time. I think Mr. Callahan showed an exhibit, a graphic chart of the A. R. A. reports, of coal car surpluses and shortages. That showed that the total never went below the net shortage period but once after 1906 and 1907 until 1916. That exhibit shows that you did not have it as a nation-wide proposition. (2314) I believe that if you will
2311 look at Mr. Callahan's exhibit you will find that normally there was a considerable working capital of coal cars. I would say that if you had 30 or 40,000 you would not have a bit

too much. When looking up the records of coal car purchases in the commission on car service, I find that the carriers in the last year or so of that long-continued car shortage that wound up in 1906 and 1907 bought a very considerable number of cars, and they had those cars then and they were in good shape. They had them for a series of years, and in that series of years the country never got into the tremendous industrial boom that wound up with the panic in 1907 until about the time the commission was hearing the Five Per Cent case. Then in 1912 and 1913 there was a good industrial period, and then we had another slump, until we got into the period of the commission's investigation in 1916. I do not know whether we had an extreme car shortage in 1907, but I think we did in 1906. I remember Commissioner Lane making a special investigation of it in 1907. He went to the north Pacific coast. (2315) That is the time the people pretty nearly froze to death in the Northwest. In the winter of 1909 and 1910 there was nothing material in the way of a car shortage; in 1912 I think we had one that was quite material. In 1919 you got into a surplus again, and in the fall you went into a shortage. There was a shortage for a slight period in the fall of 1913.

By Mr. FLETCHER:

It is true that the Illinois and Indiana carriers are prone to have a car shortage period in the winter time. I think I can make the general statement to this effect, that in all of the bituminous coal producing territories where you have a marked domestic demand without a simultaneous industrial demand or lake demand we are bound to have a seasonable car shortage that usually runs for a few months.

2312 By Commissioner AITCHISON:

(2316) I have gone through every coal car shortage and coal distribution case (2317) of the commission in the last years, and I agree that Mr. Liveright's recollection that those cases that ran along, such as the Hocking Valley, the Traer case, the Hillsdale case, and the Royal Coal and Coke Company case, all related to the big shortage that wound up in 1907. I, myself, heard of a Colorado coal shortage in 1912, which was one of these seasonable propositions; but it was not until we got into the end of 1916, when we were again in the same sort of a case that the commission found itself in in taking charge of the situation back in 1906 and 1907.

By Mr. FLETCHER:

I think it is true that almost every year somewhere in the country on some railroad or other, at some season or other, there is a car shortage.

By Mr. BROWN:

(2318) I do not know what the probable annual production of coal will be this year, 1922, but I can take the weekly figures of the

Survey and add on about 10½ million tons a week from now on and come pretty near it. It will not reach anything like 550,000,000; not with five months cessation and 60 per cent of the production. (2319) Exhibit 105 is based on Mr. Morrow's exhibits. I do not know anything but what the exhibit shows. As to whether it would be impossible for carriers to make contracts for their coal if they did not have assigned cars (2320), I rely on the record there. It is demonstrated that they have not been able to make contracts without assigned cars. As to the question whether they can not make contracts without assigned cars is a market situation. I would say that it looks to me that we must have an assigned car rule to get the
2313 carriers their coal in proper quantity and at proper times; and I will supplement that with the statement that in the negotiations that I have had with the coal operators on the subject I have always said that if they would show me where they were going to lay down the coal for the railroads as efficiently as it can be done with the assigned car I was willing to make the proper recommendations to the railroads—at least I was then. I have no connection with the railroads now except in this case. (2321) I think it deducts from the trouble we have in the coal business for the railroads to demand in the time of car shortage 100 per cent. I think it can be summarized by the statement that your coal operator is far better off if the railroad knows that it is going to get its coal on assigned cars regularly, adequately, than to have it in the position where, because it does not know it is going to get it regularly and adequately, it has to keep more cars on wheels and confiscate, as was done in 1920.

By Mr. LIVERIGHT:

(2323) It is practicable to divide fuel coal piles into smaller piles than the ones I testified to. There probably are (2324) lots of available spots along the railroads where storage can be obtained without going to the crowded centers of population; but the point I made was that coal was consumed very largely in those centers. Of course, this thing has got to be done economically, if at all. As to storing coal during normal car shortage periods as distinguished from abnormal car shortage periods (2325), when you get back to the point where you are going to have a long series of car surplus periods you are coming to the period where economic law will come pretty nearly curing the assigned car problem. You will come to a period where a large number of these mines that are now asking for such a large production a week will go out of business,
2314 and you will get to the point where your assigned car will not be a factor as a result. As to whether there is a long period in the summer when there is no demand for coal and where carriers, such as the Pennsylvania Railroad, could conveniently store its coal in piles on its railroad and then have those cars free in the winter time for revenue service, the commissioner has said that he has lost two vacations on account of car shortage. I lost a vacation in 1917, 1918, 1919, and 1920; I was easy in 1921, and I lost a part of one

in 1922. As to whether I mean that there is no such period in the summer time when there is no market for coal, (2326) I say that the thing varies in different sections; but taking it from the standpoint of the way you deal with it here in Washington, you had a few months in early 1919 when you did not have a peck of trouble here in Washington on coal cars. When you get to the point where you are not in a peck of trouble, a good many of the mines that are causing the trouble today will go out of business. They will be liquidated out of business, in my opinion. (2327) As to whether the following method of handling the fuel supply of the railroads would not be practicable—

"(1) Semi-annually, on March 1 and September 1, railroads engaged in interstate commerce shall file with the Interstate Commerce Commission a list of prices f. o. b. cars at mines which they agree to pay for their bituminous supply of coal for the six months' periods beginning the following April 1 and October 1, respectively. (2) On March 5 and September 5 such railroads shall invite tenders from all coal producers having tipple mines on their lines, producing a quality of coal suitable for their purpose for their coal supply for the six months' periods beginning April 1 and October 1 following, in such invitations specifying the price to be paid as filed with the Interstate Commerce Commission. Forms for tenders shall be prepared by the carriers, subject to the approval of the Interstate Commerce Commission, and shall
2315 accompany the invitations. (3) On March 15 and September 15 all tenders made shall be open and listed at a place previously designated therefor by the carrier. (4) Among the mines eligible to furnish railroad fuel, the carrier shall distribute its fuel supply orders for the succeeding six months in proportion to the ratings of the offering mines. Cars shall be placed at the mines in accordance with such apportionment and they shall be applied to no other purpose. (5) Cars so placed shall be classified as 'assigned,' and in the distribution of coal car equipment they shall be counted, charged, and credited in the same manner as 'unassigned' cars. (6) If the offers of coal to a carrier (2329) under these rules are not adequate for its requirements, the carrier shall be free to purchase the deficiency for the six months' period as it shall determine, but at no higher price than therefore filed with the Interstate Commerce Commission for that same period. Cars placed by a carrier for shipment of such deficiency coal shall also be deemed 'assigned,' but shall be counted, charged and credited as are 'unassigned' "—If I am to judge by experience that has been my lot over several years, I would say I doubt it. If you come to an April 1 such as you had in 1920, there are a number of roads where you would not get any bids at all for your fuel coal, such as the Chesapeake & Ohio failed to get them in 1920; just as the Norfolk & Western practically failed to get them in 1920. And then it seems to me that when you get to the point where you talk about taking coal at what you might say is an upset price on the railroad at a certain time, if theretofore they had not got-

ten the coal, you might in the intervening period have a change in the market situation (2330) that would make that upset price valueless and would make almost any price unattractive to the
2316 producer of the coal. (2331) I think as an experiment the plan suggested would fail.

By Commissioner AITCHISON:

As to the effect of rule 5 in the proposed plan, I assume that this whole arrangement contemplates a rather widespread basis of purchase, and that accordingly the cars that you assign would seldom, if ever, be in excess of the distributive share accruing to the mine, and therefore, they being counted, you would not have cars at any time placed in excess of the fair distributive share accruing to other mines, unless you got to the point where a few mines who did not have contracts would not get any cars in a particularly bad-order period.

By Examiner BARTEL:

(2332) Rule 4 contemplates merely an equitable distribution, but it means that the cars that are placed for railroad fuel must be loaded with railroad fuel in preference, as I get it.

By Mr. FLETCHER:

(2333) If there are no tenders by the operators of prices which correspond with those filed with the commission, they would not do any business under those circumstances. The provision in the rule that in the event there are no offers made they may go out and bid for coal, but not at a greater price than the price filed with the commission, is what caused me to say that you might have an entirely changed market. If the operator would not sell to them, I do not know of any place you can buy it.

By Mr. LOOS:

(2334) Referring to Exhibit 105, I think that it is the general rule that contracts of the railroads for fuel coal are negotiated some time prior to the end of March. There are variations from it.
This average price of $3.12 for contract coal was probably
2316½ made some time during the first three months of 1921, at which time the average price, as shown by the first page of my exhibit, was $3.42. The average spot price is the market price at that time and compares with the average prices shown on the first page of my exhibit for October. (2335) As to whether in the case of a falling market my exhibit indicates that railroad pays more for its contract coal than the average market price, I think that is what is shown on the contract basis there. In case of a rising market, I will say that contract coal, contracts made at that time, would be on a lower basis than the spot price. Probably that would be true of all contract coal, regardless of whether it was made with or without assigned cars. As to whether the use of assigned cars has no effect on the price which the railroad pays for coal, except as it may in-

fluence the price of the particular contract, I would say that it probably would be in the particular contract. The point of that exhibit was that you had a contract made, and assume it called for assigned cars, of $3.12. You did not use any assigned cars on that contract, and you paid more than you could have bought that coal for at spot bituminous. It is just a matter of guaranteeing the fuel supply by making contracts. (2336) As to whether the contracts represented on my exhibit, on the second page, were made with or without assigned cars, I only know this is the realization of railroad fuel as reported by Mr. Morrow on these 6,722,000 tons in October, 1921.

2317 (2338) By Mr. Loos:

I can not explain the difference between the rating of the C. T. H. & S. E. Railway on page 2 of my Exhibit 104 and the rating on Exhibit 100, except in this way, that the very next figure in Exhibit 100 shows that they ordered 5,716 cars which would be closer to the 6,000 cars [weekly rating in Exhibit 104]. I do not know how the Southeastern, if they are staying within the rules, have permitted orders of 5,716 on ratings of 4,746. I surmise that the man who furnished the information said, "If those fellows are ordering 5,716 cars a week, that is probably their prospective rating," and he divided by six. On the basis of the orders the rating is only boosted about 250 cars. As to why Exhibit 104 shows the L. & N. with a rating of 4,780 cars, or an approximate weekly rating of 29,000 cars, whereas Exhibit 95 shows 40,000 cars, I do not know the answer, but I would suggest this: You have on the L. & N. some union mines, (2339) and on this date of September 12 you are reflecting a period in this rating figure of some of the non-working period of the union mines. When you get to the period October 2 to October 7, you may be in the situation where a lot of those mines have gotten on their feet and begun to work again. Regardless of the strike rule, these mines after the strike did not all begin to work at the same time. They came in gradually, and as they came in and got orders for cars the rating may have gone ahead and thrown them back into the rating sheet.

2318 (2339) That is only a suggestion that I have as to what may have accounted for the difference. (2340) Referring to Mr. Callahan's Exhibits 34 and 35, I have no personal knowledge concerning those particular facts and do not question the figures that Mr Callahan has on his exhibits, either one of them. They have not been checked out. My statement shows that the figures were not representative of what might be expected in a normal period in the future, on account of the extraordinary conditions under which car supply was forced in 1920. There are differences even in normal periods (2341) between mines which receive assigned cars and mines which do not receive assigned cars. I would not say they are similar. They are not differences to the same extent. As to whether or not

they would be to the same extent, the comparative severity of the car shortage would be a large factor, and, of course, the extent of the orders for cars by the mines.

(2349) Mr. FLETCHER. * * * I would like to offer as Exhibit 106 a statement for the Monon Railroad, similar to those which were offered this morning on behalf of other railroads and contained in Exhibits Nos. 93 to 101, inclusive.

(The statement referred to was received in evidence as Exhibit No. 106.)

Mr. FLETCHER. I should also like to file at this time, as Exhibit No. 107, a statement requested by some one in this record which shows the ratings and the percentage of cars furnished for coal loading by divisions on the Illinois Central Railroad for the months
2319 (2350) of September, October, and November, 1922, showing the per cent of cars furnished by divisions and by the system.

(The statement referred to was received in evidence as Exhibit No. 107.)

F. C. SMITH, called as a witness and having been duly sworn, testified as follows:

Direct examination by Commissioner AITCHISON (2351):

I am chief inspector of the bureau of service [of the Interstate Commerce Commission], having been in that position since June, 1920. My previous experience with the commission has been as inspector since October, 1900. Previous to that (2353) I had railroad experience from 1874 up to 1900. I have had occasion in the course of my duties to look into the question of the service afforded by the Chesapeake & Ohio lately. Commencing at Huntington, I went over the line as far as Cincinnati, and I had occasion to make inspection of their records. The general object of my inspection trip was to determine just what the character of their freight operation was with respect to the movement of traffic. I gave consideration to the method of coal movement. (2353) I found records of private assigned car mines and railroad fuel car mines. I found records of the movement of the cars. The private cars which were brought to our attention most were the New River & Pocahontas Consolidated Coal Company and the McKinney cars. I made a study as to the relative efficiency of operation and transportation service afforded the private assigned car and the commercial car, respectively. As to whether the Chesapeake & Ohio has been able for several months past currently to transport all the freight offered to it, they
2320 have not done it, anyhow. They were not doing so at the time I made my inspection. I was able, as a result of my inspection, to determine to my satisfaction the principal cause of their trouble. (2354) There were two elements—the condition of the power from the road and the failure to utilize the power when it was ready, and inefficient clerks. The last cause is due to strike. Their clerks are all new, none of the old ones having been returned to service. We found a good deal of delay to commercial coal. We

found coal at Quinnimont, at Thurmond, at Handley; and there were also being held on their branches—the Paint Creek branch, the Cabin Creek branch, and the Piney branch—cars that had been loaded for a considerable period. At Thurmond there were cars that had been loaded in October that were still there on the 26th day of November; and at Handley there was coal standing there that had been loaded in October and the first days of November, that were still standing there on the 27th day of November; and at the Paint Creek scale yard there were 150 cars of lake coal (2355), destined to one of the lake ports for transshipment to the northwest territory, that had been loaded between November 1 and 11, and was standing there on the 27th of November. With respect to the relative speed with which coal was moved when transported in private assigned cars and commercial coal not loaded in assigned cars, we have found by their records that the coal that was being shipped in the private owned cars was moving upon the date it was billed, or not more than 4 days prior to the date of movement. The commercial coal that we found lying back at these points was all the way from 2 weeks to more than 30 days old. I made inquiry of two men in official capacities (2356) with the Chesapeake & Ohio Railway as to
2321 why the private-owned cars were moved so promptly and they permitted other cars to stand for such long periods. One was a yard master located at Thurmond and the other a train master located at Handley. I do not have their names. Their reply to my question was that they were the easiest cars to get hold of. The private cars which I speak of as receiving such movement were the New River & Pocahontas Consolidated Coal Company cars particularly. We also saw a record of McKinney cars.

Cross-examination by Mr. BRONSON:

We started to work at Huntington on the 22nd of November, and the date upon which we made note of the old cars at Thurmond was the 26th of November. (2357) The first private cars that I made note of moved in a train drawn by extra engine No. 824 on the 12th of November. There were 21 of those cars in the train that had been billed upon the 11th, the day before. They were loaded with coal going west. There were commercial cars along with these 21 private cars. They got no different movement from the commercial cars in the train, but they were currently moving cars, while the commercial cars were of a very much older date. The private cars were initialed "N. R. & P. C. C. Co." I was informed that they were owned by the Berwind-White Company. (2358) I believe a good many of them were going to Lake Erie ports. I do not know that all of them were. I do not know anything about whether there was a special request made the distributor to send his coal to the Lakes instead of the East, as he commonly did. As to whether the commercial cars that were in the same train with those 21 Berwind cars

were all old cars, occasionally they were of mixed dates. The majority of them were very old cars.

2322 By Mr. LIVERIGHT:

The McKinney cars were not going to the Lakes. They were going to Cleveland. We did not select these two companies at all. They simply came under our observation as we were checking the records. I did not see any other private cars that attracted my attention. (2359)

By Mr. BRONSON:

I counted 52 McKinney cars in one train. (2360) There were other cars in the train. I do not know whether they were commercial or fuel coal cars. That was on the 3rd of December, Sunday.

They came down off the Big Sandy division and into the Russel yard. As to whether those are the two movements which attracted my attention, there were a good many movements of New River cars. It was not confined to the two movements. Those movements which were in Berwind cars going west were almost all commercial cars. The trains consisted of 75 to 90 cars, and I think the largest number of Berwind cars was 40 in one train. The train which I made particular reference to as carrying McKinney coal was almost entirely a McKinney movement. There was just that one McKinney train that I made note of.

(2561) D. P. MORTON, called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. BRONSON:

My permanent address is Huntington, W. Va. I am a member of the Chesapeake & Ohio car allotment commission, having
2323 been a member for two and one-half years, since June, 1920.

I am a mining engineer by profession. (2362) After graduation from Virginia Polytechnic Institute, I went with the Clinchfield Coal Corporation in the capacity of draftsman, and was subsequently employed by them as construction engineer, superintendent of construction, and assistant chief engineer. I left their employ and went with the Maine Island Creek Coal Company, located at Omar, W. Va., as chief engineer. In August, 1919, I went with the Boone County Coal Corporation, as superintendent of their mines 1 and 11, and resigned from that corporation to accept a position as a member of the car allotment commission of the Chesapeake & Ohio, being mining engineer of that commission. I have prepared a statement showing the private cars in present use on the Chesapeake & Ohio Railway.

(The statement referred to, which was entitled "Statement showing information concerning private coal cars operating from coal mines on the Chesapeake & Ohio Railway six months, January to June, 1922, inclusive," was offered and received in evidence as Exhibit No. 108.)

2324 (2363) The New River & Pocahontas Consolidated Coal Company is a subsidiary of the Berwind-White interests. The N. R. & P. C. C. Company cars are commonly called Berwind's. Our record shows 1,000 of those cars. They operate regularly between the New River district and Newport News. There are occasional movements away from these points, but the biggest movement is between the New River district and Newport News. The private cars operating on the Chesapeake and Ohio are to a great extent used in so-called shuttle service.

By Commissioner AITCHISON:

(2364) As to the testimony of the preceding witness that the operation of the N. R. & P. C. C. Company cars is from the New River districts to the Great Lakes, that is not incorrect in one sense. The N. R. & P. cars operate almost exclusively between tidewater and the New River district, but, as I said, there are isolated cases where those cars go to other destinations. This case that Mr. Smith testified to is merely an isolated case.

By Mr. BRONSON:

It is an isolated case for N. R. & P. cars to go to the Lakes or to go west at all. (2365) I have prepared a statement for the entire year of 1920, similar to the one shown in Exhibit No. 77.

(The statement referred to, entitled "Comparison by operating districts of unassigned percentage of car supply, with system fuel, assigned and unassigned percentage of car supply, for year 1920, under C. S. 31, revised," was offered and received in evidence as Exhibit No. 109.)

This exhibit shows prorating all cars regardless of the class in which they are assigned normally; that the unassigned percentage of car supply was, in 1920, 51.1 per cent; that, including private cars [and cars] for system fuel, the assigned and unassigned percentage of car supply was 56 per cent for the entire year (2366) or an
2325 excess of the combined percentage over the unassigned percentage of 4.9. So far as I can determine, the only assigned cars that are attacked in this proceeding are private cars and railway fuel cars. Therefore service order No. 9 and development cars assigned during the year 1920 were included in the unassigned account and would have increased the unassigned percentage to 52.3 per cent instead of 51.1 per cent.

By Commissioner AITCHISON:

These figures are based on the rating or where the order is less than the rating.

By Mr. BROWN:

(2367) As to the practice on the Chesapeake and Ohio in not accounting for the 1,200 cars which it sets aside for its own use, that practice has just been started this year. In 1920 all cars for railway fuel were assigned with the exception of the first three months of January, February, and March.

By Commissioner AITCHISON:

This statement is the whole year without the first three months eliminated.

By Mr. BRONSON:

(2369) I have prepared an exhibit showing the effect upon the car supply of the Chesapeake and Ohio in 1920, had no private cars been in operation on that road that year.

(The statement referred to was offered and received in evidence as Exhibit No. 110.)

Briefly, this shows that without private cars on the C. & O. rails, the private car mines having to rely on system cars for their pro rata share, the unassigned percentage of car supply would have been 48.5 during the year 1920 instead of 51.1, or a net decrease of 2.6 per cent. (2370)

By Commissioner AITCHISON:

The 100 per cent is the total order. I have figured the actual unassigned cars available during the year 1920. The available cars
2326 mean all open-top cars which were available for loading on our line with the exception of the cars which were actually assigned.

By Mr. BRONSON:

(2371) The cars available are the cars actually placed at unassigned mines, regardless of whether they are C. & O. cars or of foreign railway ownership. This statement would indicate that if you take the private cars off our line entirely and continue to assign cars for railway fuel the unassigned mines in 1920 would have received a lower car supply than they did receive. (2372) I have prepared a statement showing the decreased percentage of car supply to unassigned mines in 1920 that would have resulted had railway fuel cars been prorated and private cars taken off the line.

(The statement referred to was offered and received in evidence as Exhibit No. 111.)

This statement shows that if all cars had been prorated, with the exception of private cars, and no private cars had been on the line—in other words, the private car mines would have had to rely upon the prorated share of cars available—the decrease in the percentage of the car supply under the actual unassigned car supply for 1920 would have been 1 per cent. The unassigned mines would have been worse off in 1920 than they were by that percentage.

By Commissioner AITCHISON:

That is, 1 per cent of the rating or less.

By Mr. BRONSON:

(2373) I have prepared a statement showing the excess percentage of car supply chargeable to the assignment of cars to railway fuel on the C. & O. in 1920.

(The statement referred to was offered and received in evidence as Exhibit No. 112.)

This shows that the actual increased percentage to the
2327 unassigned mines would have been 1.6 had all railway fuel cars been prorated during the year 1920 and all the other assigned cars, private cars, had remained as they were.

I can translate this increased percentage into tons to show how many more tons of coal at unassigned mines on the C. & O. in 1920 could have been shipped had railway fuel cars been prorated.

(A statement purporting to show this information was offered and received in evidence as Exhibit No. 113.) (2374)

Based on the total orders at the unassigned mines for the year 1920, this shows that the unassigned mine would have benefited to the extent of 15,105.7 cars on your 50-ton basis, or 755,284 net tons. We have carried this a little further and reduced it to the increased tonnage the individual coal loader would have received per day during the year 1920. The average number for the year 1920 was 17,221 employed at all the mines submitting sworn reports to the C. & O., and was taken from those sworn reports. Assuming that there were 300 working days, on a 51.1 per cent car supply the average individual coal loader would have worked 153.3 days. The average loss to the individual coal loader per day was therefore .286 tons per day worked. (2375) We have assumed an average earning of 70 cents per net ton to the individual loader. The individual loader would therefore have received 20 cents per day based on 153.3 days per year, or a total of $30.66 per year to the individual loader, more than he actually received in 1920. I would say that that sum of money would not induce a miner to go from one mine to another. I have prepared a statement showing the left-over cars at assigned and non-assigned mines in 1920.

(The statement referred to was offered and received in evidence as Exhibit No. 114.) (2376)

As to what this statement shows, the percentage of left-over cars at the unassigned mines on the C. & O. for the year 1920 was 8 per cent. The percentage at the assigned mines, including pri-
2328 vate cars, was 10.8 per cent, or a difference of 2.8 per cent of the supply. (2377) I have prepared a statement showing the efficiency of the individual loader at assigned and unassigned mines.

(The statement referred to was offered and received in evidence as Exhibit No. 115.)

This exhibit is tabulated from the sworn monthly reports made by all of the operators on the Chesapeake and Ohio for the year 1920, and is classified as "unassigned" and "assigned." It is merely the sum of the figures as submitted on the sworn reports for all mines. It indicates that the unassigned mines during the year 1920 loaded coal at the rate of 12.6 tons per coal loader per day (2378), while the assigned mines loaded at the rate of 11.9 tons per loader per day.

This is based on an eight-hour day almost exclusively. There are a few mines on the system which are working in excess of eight hours. In the columns under "tons per loader" there is an item above the reduced figure into tons per loader. That is the rating claimed on basis of the sworn affidavits and the tons per loader are figured from that. (2379) I have prepared an exhibit showing the tonnage produced per loader at adjacent unassigned and assigned mines on the C. & O.

Exhibit No. 116.)

This exhibit shows, without exception, that an unassigned mine, neighbor to an assigned mine, produces coal at a greater rate per day per coal loader than the neighboring unassigned mine. These mines were selected because of the fact of their proximity to each other. (2380) I would like to call attention, however, to the fact that Dorothy, which was an assigned mine for nine months and unassigned for three months; Boone 10, which was unassigned for ten months; Mifflin No. 1 and Mallory No. 1, which were unassigned for three months, produced coal at a higher rate of efficiency per man per day during the unassigned period than they did during
2329 the assigned period.

By Commissioner AITCHISON:

The loader in an unassigned mine is more efficient than one in an assigned mine because of the fact that he works more intensively. It is not true during periods of full car supply. It is true because of the fact that the coal loader in the unassigned car mine can go into the mine on so-called idle days and prepare his working place. So that on the day when they have railroad cars he has nothing to do but load coal. The miner at the assigned car mine can not do that. He has a continuous supply of cars, and it is a day by day proposition, because he has to do his "dead work" along with the coal loading on the days he has cars. (2381)

By Mr. BRONSON:

(2382) I have prepared a statement showing the maximum number of coal loaders employed in C. & O. mines and the maximum daily production per coal loader by months from January, 1920, to August, 1922.

(The statement referred to was offered and received in evidence as Exhibit No. 117.)

This statement gives a practical comparison of the average daily loading by months and the average daily order, showing the fluctuation in these two items. It also gives the maximum number of coal loaders that we have ever had on the C. & O., and it gives the maximum loading in tons per coal loader during any one year.

2330 (2383) The maximum loading in tons per coal loader occurring during June, 1922, is 8.1 tons per day under a car supply of 96.3 per cent.

By Commissioner AITCHISON:

The minimum shown is 4 in August of the same year, and that is largely attributable to short car supply. I have divided the total number of loaders on the system into the average daily loading. This does not compare with my Exhibit No. 116. It is averaged over the entire system and includes mines which can not load coal at a higher rate than 4 tons per day. It also includes mines which have loaded coal at the rate of 18 tons per day per coal loader. It is an average for all the mines of the C. & O. (2384) During June, 1922, two of our districts were down—almost entirely due to the United Mine Workers strike—the Kanawha district and the Coal River district, as compared with the Logan district, which produces the largest percentage of the coal produced on the C. & O. These districts are not so efficient; that is, the conditions under which they are working are not nearly as ideal as they are in the Logan district; consequently this figure of 8.1 tons is, I believe, higher because of that fact than it would be had Kanawha or Coal River district been working on a 100 per cent car supply at the same time. (2386) Maybe I can best illustrate the difference between Exhibit 115 and Exhibit No. 117 by saying that the former is based on ratings and the latter on performance; and the performance was subject to the car supply.

By Mr. BRONSON (2387):

2331 As to whether the difference between the two illustrates the inflation in ratings over and above actual performance, I would say that the 8.1 figure made under full car supply as compared with the 11.9 and 12.6 would represent the inflation approximately.

By Commissioner AITCHISON (2389):

I can not account for the fact that the average number of coal loaders for the year is shown in Exhibit 115 as 167[3]4 and in Exhibit 117 as 17221 in the same year, unless there is an error in the calculations.

By Mr. BRONSON (2390):

I have prepared a statement showing the relationship between the maximum daily average expectation and performance in daily coal loading and the ownership of open-top cars.

(The statement referred to was offered and received in evidence as Exhibit No. 118.)

(2391) I have taken the Railway Equipment Register for September, 1922, and converted the C. & O. Ry. ownership in open-top cars into tons and have deducted from this 6 per cent for bad order, leaving the net ton serviceable 2,272,638. From Exhibit 117 I have taken 8.1 tons per day per loader, which is the maximum that has ever been maintained by the individual coal loader during a period of full car supply, and have multiplied it by the maximum number of coal loaders that we have ever had on the system—

18,724—and determined what I call the maximum average daily expectancy in loading, all that we could expect in shipments. It figures 151,664 tons. I have divided that figure into the serviceable tonnage, as represented by the 2,272,638, to get the number of mine days and the number of calendar days of railroad-operation days that we could supply that tonnage on a 100 per cent
2332 basis. In addition to that I have taken the figure of 115,19 tons, which was the maximum average daily production or shipment that the mines on the C. & O. have ever attained during a period of full car supply or short car supply, and have divided this maximum performance into the tonnage of ownership. (2392) Even if we were called upon to transport 151,600 tons of coal per day for a reasonable period, we have equipment sufficient for a turn-around of 17 days, based on our present ownership. If we were only called upon to transport for a reasonable period the highest daily average that we have ever transported, we would have equipment enough for a turn-around of 22.7 days.

By Commissioner AITCHISON:

I do not believe my assumption of 6 per cent bad order is moderate for the present time, but I do believe it is moderate for normal operating conditions. (2393) I do not know how long it has been since the C. & O. has had as little as 6 per cent of its coal equipment in bad order. As to whether our ability to transport (2394) is limited by other factors than cars, such as motive power, my answer is yes. This exhibit assumes that in normal times our motive power is in condition to transport our maximum performance and that our working forces are such that there would be no delay such as indicated by Mr. Smith on account of clerical troubles. It assumes normal railroad operation. The C. & O. is a heavy originating road. It is not assumed that the C. & O. would have 100 per cent of its ownership on its lines. (2395) We feel that if we have not our maximum ownership on the line we would have foreign railway cars to replace them. As to whether when we turn a car over, for instance, to the Pere Marquette we expect the Pere Marquette
2333 to supply us with a car, I am not qualified to answer. My exhibit is postulated upon a turn-around of so many days, based on ownership. I assume as a basis for figuring out our turn-around that we have 2,417,700 tons capacity upon our lines, which 100 per cent of our ownership. (2396) As to whether there has been a time when we have been able to reach that since I have been with the C. & O., in the year 1921, I think we did. I do not think we ever do have our ownership on our lines when there has been an active demand for coal. Mr. Booth [our superintendent of transportation] [2393] advised me that the largest percentage that we have had in times when the coal movement has been brisk was around 80 per cent. (2397) The presence of our equipment did embarrass us when we had so much of it in empty equipment in 1921. I would not say how many cars we had of our own ownership in 1921. We

did have trouble in finding side-track room for those cars. I think we did put most of them away. I do not recall exact details as to how it was done. This statement simply shows the relationship between maximum expectancy, maximum performance, average daily performance for a year on railroad open-top ownership. That is all it is intended to show.

(2398) (Ten statements were offered by Mr. Bronson and were received in evidence as Exhibits Nos. 118 to 127 inclusive.)

By Commissioner AITCHISON:

The exhibits explain themselves to a large extent. As to No. 119, the last column shows the average number of days per week supplied on ratings or order where less. That is the figure used by several witnesses who have said that we were furnishing one and one-half or two days' car supply per week. The third column
2334 from the end shows the number of days we would have to supply the mines with their ratings in order to load coal at the rate of 6 times our maximum expectancy for one week. Our maximum expectation as taken from the previous statement, 118, is 151,664 tons, or 3,033 cars. (2399) Exhibit No. 120 is self-explanatory and simply shows the fluctuation in the number of mines working as compared with the tonnage shipped by months from January, 1917, to October, 1922, inclusive. In March, 1922, you have 390 mines open, producing or shipping 2,663,830 tons of coal. In October you have 576 mines open, shipping 1,819,560 tons of coal. In other words, the C. & O. was called upon in October, 1922, to spread its service to 576 mines, shipping 1,800,000 tons of coal, as against a call for service from 390 mines in March, shipping 2,600,000 tons of coal. This indicates the sporadic demand for car supply.

2335 (2400) About 625 mines are open at the present time on the C. & O.; that is, in November, 1922. About a hundred of those mines are from one to three car mines. Those mines are not constantly open, as this exhibit shows. When the car supply gets good and the market falls off they usually shut down. When the car supply falls off, due possibly to increased demand, they open up again. And that operates to decrease transportation service. Exhibit 121 is very similar to 120, only it shows the number of mines in the high volatile-coal districts (2401) producing high-volatile steam coal and indicates the number of mines that the C. & O. could rely on for its fuel requirements by spreading the contracts. In Exhibit 122 I have assumed that only 75 per cent of these mines produce coal of sufficient quality for engine purposes. This exhibit is devised for the purpose of showing the operation of a preferential contract for fuel on a decreasing percentage of car supply. With respect to Mr. Pollock's testimony concerning his mines, Spruce River 2 and 3, (2402) had all cars been prorated, these mines would have actually received 845 tons in March of 1920 more than he would have been entitled to, had

all cars been prorated. Mr. Pollock failed to take this into account and has credited himself with producing a tonnage in excess of what he was entitled to. He actually produced that, but that tonnage had to be taken away from him in order to equalize the distribution of cars. In April, 1920, he would have been entitled to 1,714 tons more if cars had been prorated, instead of 2,131. In May he would have been entitled to 768 tons more, instead of 1,746, or the net he was short for the three months' period, because the C. & O. did not prorate assigned cars, 1,637 tons. If private cars had been taken off the line and all cars prorated, the Spruce River mines would have received (2403) 1 per cent less, according to a previous exhibit, than they actually were entitled to on the
2336 unassigned basis. With respect to Mr. Pollock's testimony as to losing coal loaders to the Boone County Coal Corporation's mines in May, 1920, Exhibit 124 shows that Spruce River 2 and 3 lost their men, but I find that Boone County No. 1 lost one man during the same period. Boone County No. 3 lost 12 men. Boone County No. 4 had the same number of men as in April. Boone County No. 5 lost 8 men. Boone County No. 10 lost one man, and Mordue colliery, which was another assigned mine (2404), in the Coal River district, gained 3 men. Possibly some of these men that the Spruce River mines lost went to the Boone County mines, but the Boone County mines also lost more men than they gained from Spruce River mines, as sworn to on their affidavits. With respect to Mr. D. M. Morton's testimony concerning the Leevale and American Eagle mines, I believe he stated that the Leevale mine worked 54 per cent in January, 43 per cent in February, 44 per cent in March, and 32 per cent in April, May, and June, the per cent based on the cars ordered and supplied to Leevale mine was 60 per cent in January, 51.3 in February, 59.8 in March, and at no time during the three months, April, May, and June, was it as low as testified. (2405) The percentage was entirely different from the percentage he testified to. These percentages are taken from our car-distribution records, the record of his cars ordered, and cars supplied to his mine; but it represents a bona fide percentage of car supply at his mine based on his order, or his rating when his order was less than his rating. (2406) Exhibit 126 is a statement showing additional cars that Morton's mines would have received in November, 1922, had railway fuel cars been prorated. It shows that the Ameagle coal mine would have received 4.7 more cars in November, 1922, and that the Leevale mine would have received 6 more cars if system fuel cars had been
2337 pro-rated; that is, 6 cars in one month. Leevale mine was opened in the year 1911, I think, and the Ameagle mine in 1919. The former is an especially good piece of property. I consider it one of the best or the most ideal mines in the coal river district. The Ameagle coal mine is above the average in the coal river district, and is well-equipped and is a good mine in every respect. These

mines, so far as I know, with the exception of a few days at a time, due to breakdowns or something of that sort (2407) or during strike periods, have been in continuous operation. If you were to eliminate the private cars and pro-rate all remaining cars, the additional cars to which the Leevale mine would have been entitled in November would be approximately six-tenths of one per cent, or two cars at the Leevale mine. Concerning Mr. Morton's testimony as to the number of loaders working at the Leevale mine, my Exhibit 116 shows that that mine, according to the sworn report submitted to us for rating purposes, had 36 loaders in January. In May he averaged 44 loaders. If he testified to 36 plus 3, or 39 as a maximum, and lost 11, leaving 28, certainly his average could not have been as high as 44. (2408) It shows that in December he had 36 men as against 36 in January. His average for the year was in excess of the number of men he started the year with, while the Dorothy average for the year was one man less than the number of men he started the year with. The figures he gave in his evidence and the figures he gave in his affidavits do not seem to gee. I have made an examination of the actual working time by the individual miner at Dorothy and Leevale mines in the months of July and August, 1920, when Leevale was working 16 days in July and 18 days in August, while Dorothy worked 27 days in July and 26 days in August. (2409) The figures shown on this compilation were taken from the mine's pay roll from which the men were paid their wages. It shows that at Dor-
2338 othy during the month of July there was a total of 106 loaders on the roll during the month. 73 loaders were on the roll for the entire month. Every loader who was on the roll for that entire month had an opportunity to work 27 days. Not a single man worked 27 days. Only 21 of them worked 26 days, and the 73 men, or the total number of men on the roll, worked only an average of 16 days. At Leevale for the same period there were 36 individual loaders who were on the roll the entire month. They had an opportunity to work 16 full days. Each of them took advantage of his opportunity. The 36 men worked 10 days. From these figures the men would have had no incentive based on working time to leave Levale and go to Dorothy. The 5 men in August from the Levale mine might have had some incentive. (2410) The total coal produced at Dorothy mine in July was 21,880 tons, which divided by the number of working days, 27, and divided again by 73, the average number of loaders employed, gives you 11.1 tons per coal loader per day. The same time the Levale mine produced coal at the rate of 14.2 tons per coal loader per day.

By Commissioner AITCHISON (2411):

As to the reason for this difference, the individual coal loader has an opportunity to prepare his working place on idle days as I have already explained.

By Mr. BRONSON:

According to Exhibit 127, the turnover is slightly greater in August at the fuel mine than at the other mine and less in July. (2412) We are using 1920 in this statement because it appears to be more nearly a representative car shortage year than 1922, because we only had one labor disturbance in 1920. We had a very good market, whereas in 1922 we had a sluggish market for a time, and two very serious strikes. I believe that the 1920 statistics would be more representative of true conditions than any other statistics we could produce.

2339 Cross-examination by Mr. LIVERIGHT:

Exhibit 108 was compiled in the office of the car accountant at Richmond. (2413) With respect to the mileage per car per day of the McKinney Steel Company cars in March, 1922, I do not know the mileage between Marrowbone Branch and Cleveland. I believe the exhibit is meant to indicate that the average haul on our railroad per car per day for the service that we are rendering the McKinney Steel Company is 51.3 in the month of March, 1922. As to the mileage of 2 miles a day for the New River & Pocahontas Consolidated Coal Company in the same month, you must bear in mind that the Berwind mines to a large extent were not in operation during the month of March. (2414) The distance from Hinton to Newport News is approximately 350 miles. As to whether it would take a car 175 days to get there according to my average, this figure represents the mileage per total number of cars on the line, not per car moved; I mean, cars owned by the operator which are on the C. & O.

By Commissioner AITCHISON:

I did not make this exhibit and am not familiar enough with the mileage and the method of determining the mileage per car to testify.

DEC. 14, 1922.

ALBERT L. VOGL, called as a witness, and having been duly sworn, testified as follows (2421):

By Commissioner AITCHISON:

I am attorney at law, living at Denver, Colorado, and appear here as counsel in charge of traffic matters for the Colorado & New Mexico Coal Operators' Association. (2422) My testimony is given on behalf of the association. I desire to introduce as an exhibit a three-page statement headed, "Working hours, rules for distribution of cars for transportation of coal."

2340 The Colorado & New Mexico Coal Operators' Association represents about 75 per cent of the total coal production of the State of Colorado, which averages from 10 to 12 million tons a year. It also represents about 80 per cent to the production of New Mexico; that production being restricted to what is known as the Ratoon district and the Dawson district, in northern New Mexico, within 30 miles of the Colorado bound'ry. (2423) In 1911, which was preceding the commencement of what has been termed idle-hour rules

for car distribution, and which is now generally known in Colorado as the working hour basis of rules, the principal trouble in Colorado was in what is known as the Walsenburg and Trinidad districts and in the Canon City district, in southern Colorado. Outside of that the principal bituminous producing district is located on what is known as the Denver & Salt Lake road, or the Moffat road, and at that time it was a comparatively new road with very few mines there, so that we have had very little trouble in regard to distribution of cars. As to the big lignite district, which is about 30 miles north of Denver, probably 65 to 70 per cent of its products is sold in Denver, and on account of the short distance from Denver where the supply of empties originates to the mines, there was very little trouble in the lignite district. In southern Colorado at that time there were three operators that were generally termed large operators, the Rocky Mountain Fuel Company, the Colorado Fuel & Iron Company, and the Victor-American Fuel Company. (2424) Then there were a number of so-called independent operators. It was among these so-called independent operators that the Colorado Coal Traffic Association was formed. At that time there was considerable controversy, as shown by the records of the commission, which led to a number of proceedings being brought before this commission alleging discrimination in the matter of distribution of cars to the mines. The trouble we had down there, first of all, was that you could not get any agreement among the operators as to what was the rating of the
2341 mines. That was true not only of the physical capacity of the mines but also of the commercial capacity. As to the latter, the situation in Colorado may be different from what it is elsewhere. We are largely domestic coal producers. (2425) Then we use in Colorado a very large number of box and stock cars for loading coal. The carriers might put 10 box cars, or 10 stock cars, into one mine and 10 open cars into another mine, and the railroad would claim that the distribution had been fair. The operator claimed that it takes about 14 box cars to equal the loading of 10 open cars; therefore, whilst the number of cars were the same, the capacity of the cars was different, and the mines were being discriminated against. The carriers did not have to acquiesce in that condition because this system of working hours of course takes care of that automatically. (2426) The third trouble we had there was that it was not only necessary to have the cars equitably distributed, but it was also necessary that the operators themselves should be satisfied that the distribution was fair, and that could only be accomplished by a system of distribution which was easily checked up. In that situation Mr. Durban, who was traffic manager of the Colorado Coal Traffic Association, and several of the operators and myself, were called in together to see whether we could devise some system of rules which would be satisfactory to the operators and then induce the carriers to accept them. Outside of the troubles that I have already related, of course a fair car distribution in Colorado worked,

as I assume it does elsewhere, in this way, that if one mine can give its miners steadier work than another mine, then the miners gradually go to the mine that is giving the steadiest work. Therefore the idea occurred to us that what we were really after was to give equal working time to the miners in the mines so that there would not be any preference on the part of labor to go from one mine to another. Therefore somebody suggested that
2342 what we would do was to equalize the idle time between the mines, (2427) and that is what led to the term "idle hours," because the basis of rules was adopted to equalize the idle hours which each mine had. The basis was to equalize the idle hours due to railroad disability. Subsequently we said that what a mine really wants is not additional hours; it is working hours, so that name was changed, although the rules were not changed as a result, to a working hour basis; and that is the way it is generally known in Colorado now, as the working hour basis. As to the situation in New Mexico, in the Ratoon district all of the mines are owned by one interest, the St. Louis, Rocky Mountain & Pacific Company, and in the Dawson district, all of the mines are owned by one interest, the Phelps Dodge Corporation. (2428) All of the production in each district is controlled by one company; so that they have no problem down there of distributing cars in their districts between competing operators, because there are no competing operators. (2430) With respect to the working hour basis, we want our rules for our own State. We first of all found that these rules automatically took care of any questions of rating. (2431) We sent you a message that one of the operators in the Denver and Salt Lake, or the Moffat road, serving the Routt County field, at our meeting went on record as objecting to the working hour basis of rules. (2432) That was correct at the time. Subsequently the president of the company came to a meeting which we held to consider specific rules. That company was the Moffat Coal Company, which is a company that received a great many assigned cars from the Denver & Salt Lake road. Mr. Sam Perry, president of that company, at that meeting said that we were authorized to say that he was not opposed to the working hour rules; he was opposed to the assigned car rule as we have it in these working hour rules, which is the same rule we have had from 1912 to 1918. One of the most important
2343 advantages is that we do not have to wait 30 days to balance up shortages of cars. Our rules provide that we balance up any inequalities in one calendar week at the commencement of the next calendar week. (2433) Any situation such as we have in Colorado, where our business is very largely a domestic business and changes vary considerably from week to week with weather conditions, it would be a great disadvantage to an operator if he had to wait until the end of the month in order to equalize any discriminations which had occurred during the previous month,

because in the next month weather conditions might be so entirely changed that it would not do him any good at all to equalize. (2434) Rule No. 1 is the essence of these rules, the balance of the rules being merely regulations to carry out the spirit of this rule. The rule is as follows: "The distribution of cars for the transportation of coal shall be upon a basis which shall give all mines an opportunity to work approximately the same number and continuity of hours. Inequalities occurring in one calendar week shall be adjusted within the following calendar week, except as herein otherwise provided." The only change that has been made in that rule since the rules were in effect from 1912 to 1918 is to use the words "and continuity." That was suggested by some fears that were expressed by some of the operators on the Denver & Salt Lake road by what we had read in regard to this round robin system. [For example,] my mine might have cars put into it on Monday, Tuesday, and Wednesday. I worked three days that week. They might give another mine cars on Monday, Wednesday, and Friday. On the idle days the miners in the second mine, working on the alternate days, could go in and clean up their working places and get out a considerably larger tonnage on the day that the mine was actually working. (2435) So if they want me to work on consecutive days, then I want my competitor to work on consecutive days. If they want me to work on alternate days, then I
2344 want my competitor to work on alternate days, so that my miners have the same chance of getting in a full day's work and equal tonnage on the day that the mine is dumping coal that my competitor has. I think that carries out the theory of this round robin, as near as I understand it. We do not, as will appear from a later rule, insist on having a full day's work if the railroad can not give us sufficient cars for a full day's work. As to whether the mine operators might agree among themselves and advise the carrier so that the cars should be distributed in full day shifts, from the standpoint of the miner, the answer is, yes. From the standpoint of the railroad, I am not so sure. I think it would depend very largely on local conditions. At our lignite mines in northern Colorado I think that that could be done, because the source of empties is about 25 to 30 miles from the source of the mines. (2436) With the southern Colorado mines, where we have to haul somewhere from 65 to 178 miles, depending upon where the empties are coming from, I can see difficulties in the way of a railroad being able to guarantee a mine full car supply for a whole day, particularly where you have got a territory such as we have, with a mountainous haul and liability of trouble on those standard gauge roads with excessive grades, excessive curvature, and, in the winter time, excessive operating conditions. I imagine that the situation would frequently develop that the railroad puts us in over night cars which will last us half a day, expecting that some time in the

forenoon they will give us a further supply of cars. The railroad would not be willing to make the agreement, because the railroad would not be willing to allow us to keep our mine idle when we have a half a day's car supply in the morning. (2437) Rule 2 is a new rule which has been incorporated in these proposed rules, which rules seem to have been agreed to by our association, (2438) and by the Colorado & Southern and the Rio Grande West-
2345 ern, our two principal originating roads. It reads: "A mine shall be considered as working during all hours when it is dumping coal into railroad or other transportation equipment." The first paragraph of rule 3 reads, (2439) "9 hours will constitute the established tipple working day." The previous rules were that 8 hours, instead of 9 hours, should constitute the working day. This is mostly a nonunion field. Prior to the last strike we had some mines that were unionized, but most of them now are nonunion. Paragraph (b) merely provides that if a mine worked Sundays and legal holidays, the time counts against the mine the same as any other day.

2346 (2440) Paragraphs (c) and (d) provide that two or more mines using the same tipple will be treated as one mine, and where one mine uses two or more tipples it counts as one mine. (2441) We do not have storage piles, except occasionally where we have had to dump slack, and then, if there is a good market for slack, we pick up the slack later on and load. That is the only time that we ever use any storage piles. That is an unusual situation. It occurred some time during the war, but it is very seldom that we ever have that question of picking up slack or picking up coal from a storage pile, because we do not use storage piles. (2442)

By Mr. BROWN (2443):

Rule 4 is merely an enumeration of what the mines shall report to the railroad in the matter of ordering cars. (2444) Rule 5 provides that any mine rendering incorrect reports shall be penalized with one day's idle time.

By Commissioner AITCHISON:

The rules do not provide for a rating expressed in cars. Of course the railroads for their own convenience must have some sort of a rating in cars. For instance, if my mine works to-day for 8 hours, and then you are entitled to-morrow to work 8 hours (2445), of course the railroad has to have some idea as to what will run your mine for 8 hours. But what we regard as the rating is the number of hours we are allowed to work. There is not any advantage in a mine padding or enlarging on its ability to load. If I claim that I have the ability to load 1,400 tons and I can only load 1,000 tons, and the railroad puts in a sufficient number of
2347 cars to load 1,400 tons, and I do not load them in the 8-hour day, and they find I have some cars over at the end of the time, they will quickly check the difference up, and therefore there

is no incentive for a mine to increase its alleged capacity, and they do not do it.

By Mr. ROPIEQUET (2447):

There is not any rule which provides for taking care of a disagreement between the railroad and the operator as to incorrect reports under rule 5. But the matter of how long you have worked is so open and notorious anybody can check it up.

By Mr. MCAULIFFE (2448):

In our district our mines are located so closely together, although the district extends probably 50 miles from Agua north up to the end of the Loma branch, but you will find so many mines, for instance, on the Loma branch that operators can pretty well check each other up. (2449) In most of our Walsenburg district they have what they term joint mines. While there are some mines located on the Colorado & Southern tracks and some mines that are located exclusively on the Denver & Rio Grande Western's tracks, both roads publish rates from each mine, whether they are on their own track or on the other man's track. The road on whose line the mine is located does the switching for that mine.

By Mr. CARMALT (2450):

Rule 7 provides that if a mine has 40 per cent of a nine hour car supply on hand at 7 a. m. and refuses to go to work, then it is charged with a full day's time that day. But if it starts in to work on those 40 per cent of cars, and for any reason the railroad can not get any more cars that day, or until late that day, so that late that day it places cars in too late to load, those cars that are placed
2348 in too late to load will not be charged against it that day.

(2451) Rule 8 is: "A mine closed for reasons other than railroad disability will be considered as having worked, and when it is known in advance that a mine will not operate for a period of 48 hours or more immediate notice (confirmed in writing) of that fact shall be given by the mine operator to the billing agent or agents." Rule 9 provides after a mine has been closed 48 hours what notice the railroad must have before they can be counted in again. (2452) Rule 10 is that an empty car placed at a mine will be counted available for loading until shipping directions are received by the billing agent, and there is a provision as to loading of equipment to capacity. Rule 11 provides that time lost by any mine on account of refusal of the mine operator to accept available cars on account of routing of such cars, or class of equipment, will not be equalized. (2453) Rule 12 is the assigned car rule which has been in the working hour rules for the period from 1912 to 1918 and shows how this assigned car rule is treated under the working hour basis. We work on this basis, that if I am loading railroad company coal I can work all of the hours that the railroad will give me cars for, regardless of what my neighbors are working; but if I am going into the open commercial market, then, before I can load

any commercial coal, the rest of the mines of the district have got to be equalized on time with the time I have been working on railroad fuel.

By Examiner BARTELL:

As to whether there would be an equalizing of time if a mine is worked on railroad fuel for 30 days and then goes on commercial fuel, there has never been any determination yet as to what period of time generally constitutes a unit in this respect. I would say that my judgment would be that if no period of free car supply had
2349 intervened, then they would have to be equalized. There are objections to assigned car rules from both sides. (2454) We are working under C. S. 31 there; we had to under the rules that were promulgated. An objection, for instance, of one of the larger operators who is working on assigned cars to the assigned car rule [under the working hour basis] was this: The railroad is giving him a proportion of cars for company fuel loading. That proportion of cars is more than the proportion he would get if he were working exclusively on commercial coal. Therefore they will not give him any cars for commercial loading, which is the way we understand the rules. He wanted me to insist that the cars that he has for company fuel should not be counted against him, because it is shutting him out from the commercial market. (2455) That is his side of the case and is the situation where there is a market which pays better for commercial coal than the railroad pays for its coal. On the other hand, there come times during a car shortage period that the mine working on railroad fuel is working longer hours, and the miners at the commercial mines are dissatisfied because the mine working on railroad fuel has longer hours than they, and therefore the commercial mine is dissatisfied. But we felt that this rule as it is worded here follows the spirit of this commission's decision in the Traer case, and that is what we have been working on. As long as there is a car shortage somebody is going to be dissatisfied, but we believe that this rule as it reads now and as it read for 6 years, from 1912 to 1918, covers the spirit of the decision in the Traer case. As to whether that is the practice of all carriers out in that territory, it is not the practice of the Denver & Salt Lake road. (2456) Their practice has been, first of all, to give to the two companies furnishing company coal all of the cars that they need for loading company coal, and then to distribute the balance of the cars which are available for commercial coal
2350 to all of the mines upon some sort of a rating basis, not counting against the two companies loading company coal the cars that they have received for company coal. The two companies loading railroad coal first get their car supply for company coal and in addition their pro rata share of cars for commercial loading.

By Commissioner AITCHISON:

The receiver of the Denver & Salt Lake road has discussed that matter very freely and frankly with me and told me that is what he

is doing and has given us his reasons for that, and that has enabled him to get fuel at a cheaper price. I have told him just as frankly that I believed he was violating the law.

By Mr. ROPIEQUET (2461):

As to equalizing under this rule where a railroad takes coal from a mine during the whole period of car shortage, the probalities are that that mine would not ship any commercial coal at all. The mine would have full time for the whole period that it was shipping to the railroad, if the railroad took that much coal from it. As a practical matter, I do not believe that many of our mines are able to get large enough railroad orders to work full time, and that is where the mines working on railroad coal generally find their difficulties, that they could load some commercial coal and cannot get cars for it, and that is their objection to the assigned car rule. It is the practice in our field to have railroads take coal for a long period of time under contract from one mine.

By Commissioner AITCHISON (2462):

The railroad contracts in our district are not usually sufficient to take the full output of any mine.

2351 By Mr. ROPIEQUET:

Our rule would permit their taking the output for the full period of car shortage and getting cars all the time. Rule 13 is merely a provision for railroad agents keeping their records and having those records available for the operators at any time to check over.

By Mr. LIVERIGHT (2470):

As to whether we have any private car problem on our railroad, we never had a mine which could afford to buy private cars in Colorado.

By Commissioner AITCHISON (2472):

As to whether we went through any periods of car shortage from 1912 to 1918, every year, from about the beginning of September on account of ours being a seasonable business, until around the first of December, and if the weather is very cold, until along in January and February, we have car shortage periods. (2480)

(The three-page exhibit previously offered by Mr. Vogl was received in evidence as Exhibit No. 128.)

2352 GEORGE C. RANDALL (2481), called as a witness, having been duly sworn, testified as follows:

Direct examination by Mr. VOGL:

I live in Washington, D. C. From 1904 to 1906 I was car distributor and chief dispatcher of the Colorado & Southern, at Cheyenne, Wyo.; from 1906 to 1913 chief clerk to the superintendent of transportation; 1913 to 1919, superintendent of transportation on the Colorado & Southern. I have been out of the railroad service until

September 18 of this year, and am now with the car service division of the A. R. A. I am appearing here as representing the Colorado & Southern at their request. I was party to the conference which resulted in the establishment of what was then known as the idle hour basis and now known as the working hour basis for use in Colorado. (2482)

By Commissioner AITCHISON:

I think in substance the testimony given by Mr. Vogl is very complete and covers the situation accurately. During the period from 1906, when I first became connected with the car distribution problem in the Colorado field, and up to 1912, when these so-called idle hour rules were adopted, it was a constant source of dissention between the operators and the railroad companies as to what each mine was entitled to in the way of rating; and there was scarcely a day during periods of car shortage when we were not confronted with four or five operators who were disgruntled at the treatment they were getting as compared with other operators. (2483) The carriers were visited by a committee from the Colorado Coal Traffic Association, and the substance of the meeting or meetings was that all operators seemed to be satisfied if they could work the same number of hours that the other fellow worked. From that thought we developed these idle hour rules. During the entire period
2353 from 1912 to 1918, when these rules were dropped, we had not a single complaint from an operator or any dissension in any way on the part of the carriers in their application. That spoke more to me about the practicability and the flexibility of the rules than anything anyone could say. The rules put in at that time were substantially the rules shown in Mr. Vogl's Exhibit No. 128.

By Mr. VOGL:

The Colorado & Southern is desirous of (2484) replacing these rules in effect, believing them to be very much more flexible and more adapted to the needs of that country than the rules promulgated by C. S. 31, revised.

By Commissioner AITCHISON:

I think these rules were never applied in Wyoming and they were not, to my knowledge, ever applied in New Mexico. The Santa Fe was a party to these rules in the distribution of cars at joint mines in Colorado, and the Santa Fe was very well satisfied with their working, but I think they never applied them to the New Mexico situation. That road had more than one working division. Coal mines on its northern division and coal mines on its southern division both received cars from the same source. The demand being largely a day to day proposition, according to the variance of the weather, we would instruct (2485) the local people to rate the northern division a certain percentage of the empties, and so on. We attempted periodically to equalize on the basis of the working hours. We tried in the northern territory, as we did in the southern territory, but

we found that there was not so much dissatisfaction on the part of the operator even if the distribution should not be quite to the letter of the rules. The mines in the northern field were producing
2354 a different grade of coal and they did not enter the same markets as the mines in the southern field. Therefore if they saw that the same treatment was given with respect to the grade in which they were interested, they did not care about the rest of it. But, as a matter of fact, the distribution was very equitable. From my knowledge I would say that that applies as well to the other carriers.

By Mr. BROWN:

(2486) From my railroad experience I could not say that I have any idea as to whether these rules would be applicable to the conditions which exist east of the Mississippi River. (2487) The Wyoming mines are located on the main lines of the carriers. There are two or three mines located contiguous to each other but the principal location is several hundred miles separated. The Union mines have operations at Hanna and Rock Springs. Then come the mines on the Oregon Short Line west of Granger, and then there are mines up in the northern part of the State.

By Mr. LOOS:

(2488) We did not have any trouble with the carriers while these rules were in effect in equalizing distribution between the operators week by week. The whole thing seemed to rest with the chief dispatcher on each division, and he was able, a good part of the time, to equalize during the week and not wait for the following week.

Redirect examination by Mr. VOGL:

I intended by my answer to state that at Rock Springs there are several mines and at Casper several mines and at Sheridan several mines.

By Mr. BROWN:

They are not all owned by one operator.

2355 L. F. WILSON (2489), called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. VOGL:

I am superintendent of transportation (2490) on the Denver, Rio Grande Western, and am located at Denver, Colo. I have been about 22 years in railroad work, the last five and a half of which I have been in my present position. We have a coal district at Bowie and at Somerset, in the extreme western part of Colorado. It is our endeavor to give the mines in standard gauge territory in Colorado approximately the same percentage of cars supply.

By Commissioner AITCHISON:

I mean percentage of car supply under the C. S. 31 rules as compared with the ratings. When the idle hour plan was in effect

(2491) it was our endeavor to work each standard gauge district in Colorado approximately the same number of hours. The narrow gauge territory must be treated as a separate proposition. There are seasons of car shortage when we can work the narrow gauge mines practically 100 per cent, while we can not work the standard gauge mines, to exceed, say, 60 per cent. Then again during a car shortage season the situation is reversed, due to weather and power conditions. In a way we treat them as two separate railroads. We have taken the position that, simply because the narrow gauge mines must be short of equipment, there is no reason why we should short supply the standard gauge mines. In other words, there would be a waste of transportation that might otherwise be performed. (2492) Of course we would like to give the same percentage of car supply in Colorado and Utah, and vice versa, but that is not always a possibility for the reason that the source of supply is from different directions. Utah feeds north and west and southwest and Colorado feeds east and southeast. It is impossible to currently equalize the percentage of car supply in the two districts, although we come fairly close to it. The
2356 mine operators in Utah have expressed themselves as favorable to the idle hour rules. I have a telegram on the subject which I just received indicating that attitude with one or two exceptions.

By Mr. VOGL:

(2494) Rule C. S. 31 has not worked satisfactorily to me since it has been in effect in Colorado on our railroad nor to the operators, I judge from their complaints.

By Commissioner AITCHISON:

There are several objections to the rules as expressed by the operators, and also as I see them (2495), as they are too elaborate and complicated, requiring a good deal of accounting and expert supervision, sufficient of which supervision some of the smaller railroads have not available. In the next place the mine operators themselves, or at least the majority of them, do not understand the rules, and, as a consequence, they are more prone to complain and fuss about them. In the next place the rules are unfair to some mine operators, in that some of the operators have the opportunity to, and in fact do, inflate the ratings. The difficulty in telling what the time worked in the mine may be is one of the objections and incorrect reporting under the rules. (2496)

By Mr. ROPIEQUET:

If the requirement that inside time be accounted be eliminated from the C. S.-31, leaving only the requirement as to tipple time, my objection would be removed.

By Mr. LOOS (2497):

We have seven divisions, including standard gauge lines, on five of which coal is produced. We have had a little difficulty in equal-

izing the distribution of cars between these divsions. As explained here, we can not possibly currently equalize the time worked in Colorado and Utah. (2498) Within Colorado we can
2357 approximately equalize, with the exception that at times operating conditions prevent an ideal distribution between the eastern part of Colorado and the western part, for the reason that in the western part we have to move the empties 400 to 450 miles, over grades as high as 3 per cent. We would not have difficulty in equalizing distribution between the eastern and western parts within a period of a couple of weeks unless the weather conditions or something of that kind prevent it.

By Mr. LIVERIGHT:

No complaint about assigned cars came up while we were working under the idle hour rules after I went into office; that is, from May, 1917, to October, 1918. I can not describe in detail just what was done. (2499) There was quite a number of cars coming in for company use. We load quite a large amount of foreign fuel on our rails, as does the Colorado & Southern. That is on partial output contracts. As to whether those mines loading these assigned cars were equalized with commercial mines, it is my impression that we handled it just as rule 12 outlines. We equalize from week to week. This equalization is a continuous performance.

By Commissioner AITCHISON:

I can not say definitely as to whether the equalization applied to cars placed commercially and not to cars placed for railroad fuel, for the reason that I do not recall now what car shortage period existed from May, 1917, to October, 1918, at the time I worked under these rules.

By Mr. VOGL (2500):

It is a fact that in Colorado usually that where there is a free car supply there is also a bad market, so that the market condition does not permit the operator to really show the capacity of his mine in periods of car shortage. If you took it over a long period it would not be an equitable matter. (2502)

D. P. MORTON, recalled as a witness, testified further as follows (2503):

By Mr. BRONSON:

2358 With reference to my statement that the New River Colliery, and Pocahontas Consolidated Coal Company was a Berwind-White subsidiary, I have since made inquiry and learned that Mr. E. J. Berwind is president of the New River and Pocahontas Consolidated Coal Company and the majority stockholder, but the N. R. P. C. C. Co. is not a subsidiary of the Berwind-White interests. With respect to certain differences in Exhibits Nos. 115 and 117, Exhibit No. 115 was prepared to give a direct comparison between the efficiency of coal loader at the strictly unas-

signed mine and at the strictly assigned mine. We have on our line possibly 10 mines which coke coal. (2504) Under C. S. 31, revised, a coking mine's rating depends upon his coal shipments, not upon his coal production. I have eliminated coking mines from Exhibit No. 115, and you will find that the sum of the unassigned loaders employed by months on this exhibit at the unassigned mines, plus the actual number of coal loaders who were employed in coking mines, represents the total as shown on Exhibit No. 117.

By Commissioner AITCHISON:

(2505) As to the maximum of 8.14 shown on Exhibit No. 117, while the minimum on Exhibit No. 115 is nearly 11, one is based on hours worked. One is based on actual average daily performance, taking every working day in the month and not the hours worked. One is a calendar day and the other is arrived at by taking the hours worked as reported. (2506) Exhibit No. 115 is on ratings and Exhibit No. 117 is on bona fide performance. (2507) That 8.1 was obtained in June, 1922, during a period of full market and full car supply, or practically so—96.3—and every mine that could work, in the union and non-union fields, was working to its fullest capacity. Therefore, I assume that that 8.1 represents what we can expect to furnish our mines on an average daily performance per man under full car supply and full market, assuming the usual accidents; the normal operating experience of the mines.

2359 Cross-examination by Mr. LOOS:

(2508) In my Exhibit No. 109 I included in the column headed "Unassigned supply," cars which are left over from previous days' placement. This exhibit was strictly made in accordance with C. S. 31, revised, from our car distribution records.

2360 (2509) In the column shown as "System fuel assigned and unassigned supply," I show 593,000, and the "Unassigned supply" as 508,000 and some-odd cars. The difference between these [or approximately 85,000] is the actual difference attributable to railway-fuel and private cars alone, eliminating all other classes of assigned cars, such as Service Order No. 9 and development. The figure above that of 482,000 taken from 593,000 would give you the actual difference in car supply attributable to all classes of assigned mines. On my Exhibit 112, I show a private-car supply of 51,000 and the difference between the 85,000 and 51,000 would represent assigned railway fuel cars, namely about 34,000 cars. (2510) On Exhibit No. 112, I have eliminated the private-car order and Service Order No. 9 and the development order, and also the supply to the same classes. You may take the 516,000 [net supply for unassigned cars and railway-fuel cars] and deduct from that your 482,000, and you will get about 34,000 railway-fuel cars assigned. (2517) The figure 110,681.6 in my Exhibit 109 includes the 25,000 and some-odd cars that I show as S. O. No. 9 and development cars. (2518) If

the 34,000 system-fuel cars had been prorated, the unassigned supply would have been increased from 508,000 by the 34,000.

By Examiner BARTEL:

By system I mean all railway-fuel cars including cars assigned for foreign-railway fuel.

By Mr. BROWN:

As to whether this includes the "1,200 cars which the C. & O. orders and sets aside for its own," I believe Mr. Davin's testimony has been misinterpreted in regard to that. We have not set
2361 aside any cars for strictly fuel purposes. We use approximately on the average 1,200 cars for fuel purposes, but those cars are not the same cars all the time.

By Mr. LOOS:

My Exhibit 109 will show the average percentage of car supply for assigned-car mines by dividing the figure 110,601.6, shown in the lower right-hand corner of the sheet, by the figure 114,600.2, above, the percentage being 96.6 per cent. (2519) That means just exactly that the assigned mines received an average of 96.6 per cent during the entire year of 1920, while the unassigned mines received 51.1 per cent.

By Mr. BRONSON:

I mean of the orders based upon their ratings.

By Mr. LOOS:

Referring to my Exhibit 113, the total loss to unassigned mines of 755,284 tons means the loss to the unassigned mines only. In determining the loss to the individual coal loader, I should have divided the 755,284 by the number of loaders for the unassigned mines, 14,746, as shown on Exhibit 115, instead of by the number of loaders for all mines, 17,221. (2520) The correct figure for the total tons lost to the individual loader is 51.2 instead of 43.8. It would make the net loss for the year, arriving at the final result, $35, and approximately 83 cents, instead of $30.66, a very unappreciable amount. That would be at the rate of about 23 cents a day instead of 20 cents a day, and would represent the amount of money per day lost by the unassigned mine loaders, equivalent to 23 cents times the number of loaders in the unassigned mines.
2362 (2521) I think that would be approximately $3,500 per day. That amount would not necessarily be gained by the loaders in the assigned mines. If this money is lost by the loaders in the unassigned mines the loss is due to the fact that they did not get assigned cars for the unassigned mines and therefore they load that many more cars. That loss to the loaders in the unassigned mines does not represent a gain daily. It does in the aggregate for the year, but not daily. We are figuring on the daily basis now. (2522) Whether the average daily loss would represent the

average daily gain of the two depends on the percentage of car supply to the two classes of mines. If you assume that the unassigned car mine on a 50 percent car supply is working 150 days a year, this figure of $3,500 represents the net loss on the days this mine worked. At the same time the assigned-car mine is working 300 days a year. Therefore, the net gain to the assigned-car mine loader is $1,750 daily, instead of $3,500.

By Mr. BRONSON:

Distributing that $1,750 among 1,988, the average loaders for the year, gives approximately 88 cents, (2523) so that the difference between the earning of the loader in the unassigned mine and the loader in the assigned mine would be represented by 88 cents. (2525)

By Mr. LOOS:

Referring to my Exhibit 114, the number 38,775.9 shown in the last column as unassigned left overs naturally includes the cars which have been left over for more than one day, because of the fact that C. S. 31 (revised) requires us to count those cars daily as left over. If a partly loaded car is left over and then
2363 loaded the next day, it is counted against the mine as a car placed on two days, the day first placed and the day it was loaded. If the car was partly loaded and left over, and the next day the mine operator did not receive any cars, the partly loaded car would be charged against him on the succeeding day if he had 25 per cent of his loading at 7 o'clock; if he had empty equipment. (2528) Referring to my Exhibit 118, the cars shown as owned by the C. & O. include all open-top cars. A very, very small proportion of those cars are normally used for other commodities, but they are all available for use in the shipment of coal. (2529) As to sand and gravel, for instance, there is a comparatively small sand-and-gravel business on the C. & O. in relationship to the movement of coal. I would not like to testify as to what the figures are, but we have an empty open-top coal car going from Russell yard, we will say. We set that out at Huntington and load it with sand, and it goes right straight to the mines, and is unloaded at the mines and then loaded with coal again. It would be unwise to send that back empty when we could send it under load.

By Mr. BRONSON:

I would not like to say what the percentage is, but I believe that the biggest portion is sand that is loaded for the mines. The gravel business is something aside from that that I do not know anything about.

By Mr. LOOS:

There are other commodities that are carried in open-top equipment, (2530) and some of our open-top equipment is being constantly used; but the loading is practically entirely in the direction

of the mines, which does not tie up the equipment as if it went off our line. It might delay it for a day or so.

2364 By Mr. BROWN:

As to brick from our Portsmouth territory, I could not say whether it is loaded in coal cars. I am not prepared to testify as to every class of equipment that is used on our line. There might be isolated instances where they are used in that case, but the point is that it is an infinitesimal amount in relationship to ownership of our open top cars. We are a coal carrying road almost exclusively, as far as tonnage is concerned.

By Mr. Loos (2531):

I cannot give any figures on the mileage which we make out of our system coal cars or the average haul of the coal cars or the average number of days for a round trip. We are not producing this exhibit for that purpose. We are just showing how far ownership goes in relationship to maximum performance, maximum expected average daily loading; how far our equipment will answer the purposes in days. It is a bare statement of fact. We are not attempting to say anything as to the number of days that it takes a car to make a round trip, because that depends on somebody else and not on the C. & O., because a good portion of it goes off-line. As to whether a good deal depends on the C. & O., as testified by Mr. Smith, very properly it should. Of course, the movement of coal on our line we are responsible for. But I am not a transportation man. (2532) In June, 1922, the month of maximum performance, the Kanawha and Coal River mines were closed down on account of strike almost exclusively; but if those mines had been in operation, it would have merely extended the transportation service to a larger number of mines, and possibly our net production would have been less than it actually was. (2533) I

2365 do not believe we could have carried as many cars if our equipment was more widely distributed; but we might have carried a small portion more and again we might not. We have no actual performance figures to make an estimate of it. That is merely a question of opinion. Referring to Exhibit No. 127, the information shown for the Leevale mine was taken from an actual check of the payrolls of the company owning that mine. I did not make the check, but I had it made under my direct supervision. (2534) Naturally, every man employed in the mine would appear on the payroll if he was employed long enough to earn anything in the mine or around the mine. I consider the average daily loaders as shown for the Leevale mine on my Exhibit 127 to be a correct figure. Comparing that with our Exhibit 116, the latter shows 44 in July and 38 in August, whereas on our Exhibit 127 the figures are 36 and 29, respectively. Of those figures I consider the ones taken from the payroll to be accurate—that is, those on Exhibit 127. (2535) The figures on Exhibit 116 for April, May, and June may have been just as inaccurate. I did not check the payrolls of the Leevale mine for

April, May, and June, but took the months of July and August, because they represented as nearly as possible the average percentage of car supply for the year 1920. (2536) The affidavits on which the figures shown for the Leevale mine on our Exhibit 116 were based, were signed by the mine superintendent. Mr. Morton is not responsible for the discrepancy. (2537)

By Mr. BRONSON:

The railroads require the man in active charge of the operation to sign the affidavit. That is misconstrued in some cases, but as a general thing the affidavit is signed by the superintendent in charge of the mine and not by the president or vice president.

2366 (2539) With reference to Exhibit 127, there might be any number of reasons why a mine loader would not work on some particular day out of the possible days they might be working. The same thing applies to the assigned mines. Referring to my Exhibit 124, I have not made any check of the pay rolls to ascertain the correctness of the figure shown on that exhibit as the average number of coal loaders monthly for either the Spruce River or Boone County mines.

By Mr. BRONSON:

Those were taken from the affidavits.

By Mr. LIVERIGHT (2540):

Referring to my Exhibit 109, the 114,600.3 assigned cars shown under the heading "Order based on ratings" were actually ordered. We require and have required always the assigned car mine to order cars just the same as the unassigned car mine. He follows the rules under C. S. 31 just the same as the unassigned mine. He is not permitted to order more than his rating, and if he does order more than his rating, he is not given cars in excess of the rating. He is always held down to the rating.

By Mr. BRONSON:

As a matter of fact, the assigned car mine has no incentive to order more than its rating. In fact, in the majority of cases its order is really less than its rating.

By Mr. LIVERIGHT (2541):

I do not think there is as much incentive for the owner of an assigned car mine to distort its rating as for the owner of the unassigned car mine, because he is operating on practically 100 per cent car supply. If he can anticipate from day to day what he

2367 can load, there is no incentive for him to order more cars than he can load when he knows that on the day following he can get cars if he wants to. In Exhibit 110 I have assumed a condition in which the C. & O. operates without private cars on its rails. It is theoretical, but if the private car were eliminated (2542) the private-car mine would have to rely on other cars to supply its mine. As to whether I have made no assumption that C. & O. would buy or build

additional cars to take the place of those private cars, I have made no assumption as to the amount. I am basing it on what actually happened. We had private cars on the line in 1920. We only have a certain number of cars. We could not have bought more now and charged them in 1920. There is no assumption as to what would have become of these private cars in 1920, because the private cars were on the line, and we merely made a tabulation to show how the elimination of the private car in 1920 would have operated to the disadvantage of the unassigned-car mine. (2543) I do not care to indicate what would have become of them. I do not know. Referring to my Exhibit 114, the cars at the assigned-car operations are charged in a cumulative manner precisely as they are at the unassigned mines. An operator getting assigned cars gains no advantage through that method. There were a great many mines during 1920 which had both assigned and unassigned cars because of the issuance of service order No. 9. Prior to the issuance of that order my recollection is there were one or two mines that had foreign railway-fuel contracts for partial output.

By Examiner BARTEL (2544):

As to these partial-output contracts, my recollection is we had a few cases of that sort. I am really not absolutely definite as to
2368 that. I have taken the assigned-car count as it stood on our books and have included any such cases if there were such cases. If a foreign railroad sent its own railway cars down to take that partial output, we did not give the mine an arbitrary allotment in addition to those cars. It operates this way: If on any day the mine receiving cars for foreign-railway fuel received a proportion of assigned cars—that is, foreign-railway fuel cars—equal to the pro rata distributive share of the equipment on the system that day, or in excess of that, those cars were eliminated and marked as assigned cars. If, however, he had received an assigned equipment less than his distributive share on that day, he was entitled to the difference between what he actually received and his distributive share in unassigned equipment. (2545)

By Mr. BRONSON:

There are two percentages under distribution. In the first case we take all cars received and all cars ordered and divide to arrive at our first percentage. We divide the total order of the pooled cars into the total supply of pooled cars, and we arrive at the first percentage. We take each individual mine who normally receives assigned cars, and if the anticipated supply in actual cars to that assigned-car mine on that day was equal to or greater than that pooled percentage, that mine is treated as assigned for that day and not as unassigned. (2546) If it was less, it is treated as unassigned. If an assigned mine got one day more than its pro rata share, we would not equalize later. We do not equalize assigned cars and do not equalize the assigned mine with the unassigned percentage.

2369 By Mr. LIVERIGHT:

If he got more than his pro rata share on the day he was unassigned, he gets the penalty.

By Examiner BARTEL:

As to our practice to-day of partial output, I do not think we have a partial output on our system. If there is one I do not know.

By Mr. LIVERIGHT (2547):

On any one day a mine can not be both assigned and unassigned. It can be both assigned and unassigned for a period of one month, but for one day it is either assigned or unassigned.

By Examiner BARTEL:

If a certain quantity were sent to the mine, and cars so sent did not equal the pro rata share for that day, all cars would be treated as unassigned.

By Mr. BRONSON (2551):

It is a fact that so far as assigned cars on the C. & O. now are concerned, there are no assigned cars permitted under any circumstances except for entire output contracts for periods of six months or more. I was testifying as to 1920. Referring to my Exhibit 115, since there are a very much smaller number of loaders at the assigned mines, the loss to the individual loaders at the assigned mine would be proportionately much greater than the gain to the loader at the unassigned mine. (2553)

2370 E. G. GOODWIN, recalled as a witness, testified further as follows:

Direct examination by Mr. RIXEY:

I have heard the testimony of Mr. A. E. Vogtle, of the Corona Coal Company, which is located in the Birmingham district. With respect to the provision in the copy of contract which he filed as Exhibit No. 49 that (2554) "seller agrees to make full shipment each day to the extent of car supply before any other shipments are made," there was a similar provision in the fuel contracts for the two preceding years—that is, for 1920 and 1921. This provision was not inserted with any idea of doing away with the use of assigned cars, but to provide a general contract form which could be used in drawing up partial or entire output contracts, to strengthen our contracts (2555), to insure full contract shipments on contracts for partial outputs, and to prevent pro-rata shipments on partial output contracts, and to help us to get coal from mines which were jointly served and which might ship their coal to us or might ship it out via the other route. This provision appeared in all contracts and was not peculiar to the Alabama field at all. It is not true that the contracts in the Alabama field containing this provision in the spring of 1922 inaugurated a new system for obtaining fuel coal. The fuel contracts containing this clause during 1920, 1921, and 1922 were not confined to the Alabama field. That is our general form

of contract and has been employed since 1919. (2556) The fuel contracts in the Alabama field containing this clause were not distributed pro rata among the mines in that field on any equalized basis or in pursuance of any new plan for obtaining railway fuel
2371 requirements. The fuel contracts in the Alabama field were made just as they were in other fields with operators who could furnish the kind and quality of coal required at prices which were satisfactory to the railway company, and which called for tonnage and quantities in varying amounts from partial output to entire output. As I previously testified, practically all of our current contracts call for a maximum and minimum tonnage, representing approximately the entire output of the mine, although in some cases, like the Corona Coal Company, where we needed only enough coal at that place to take care of a coal chute located at that point, we made a partial-output contract. In the Alabama field about 80 per cent of the tonnage contracted for comes from mines from which we take the total output. The contracts, whether partial or entire output, are almost without exception for a 12 months' period. (2557) The Corona Coal Company loads into coal cars and hauls the coal from the mine to the main line track. Their contract was a partial-output contract made under the conditions I have described. I do not recall any of our railway-fuel contracts which contained a provision stating that the price was based upon the use of assigned cars. The car-distribution rules of the Southern Railway in effect in 1920, 1921, and 1922 authorized the use of assigned cars for obtaining railway-fuel requirements under contracts in the Alabama field and elsewhere; and assigned cars were resorted to and used in times of car shortage. (2558)

By Examiner BARTEL:

They used assigned cars during the life of service order 23, with exceptions which the service order prevented.

By Mr. RIXEY:

There was not any pronounced car shortage in the Alabama district subsequent to August, 1920, until July, 1922, and we had
2372 practically a full car supply in September, October, November, and December, 1920, and for the entire year of 1921, and also up to July 1, 1922. As to whether the Southern Railway fuel requirements could be supplied without the use of assigned cars under contracts containing preferential shipment clauses during 1921, a year of full car supply, the Southern Railway system used as fuel coal 38.65 per cent of all the coal produced on its lines and at least 50 per cent (2559) of all the coal produced on its lines which was of satisfactory quality for locomotive fuel. Under such conditions, if we should spread our contracts, even with a preferential shipment clause in them, among all the operators producing a satisfactory quality of coal, so that each of them had a contract for 50

per cent of his capacity, and should then run into a 35 per cent car supply, I cannot see how we could get enough coal on our lines to keep the road running without assigned cars or confiscation of unsuitable coal.

Cross-examination by Mr. Loos:

The Southern Railway has not had a contract for fuel coal with the Corona Coal Company for many years prior to July, 1922. It has been, I guess, 6 or 7 years. As to the form of contract filed by Mr. Vogtle, my impression is that it is reprinted from year to year. (2560) I have a copy of the 1920 form of contract filled in. It is dated June 7, 1920, between the Barney Coal Company and the Southern Railway Company, and reads: "Delivery: The fuel coal covered by this contract shall be delivered by seller f. o. b. cars mines, Barney, Alabama, and in such quantities within the contract as may be designated by the buyer, it being understood that such shipments will be called for as nearly as practicable in equal daily quantities, Sundays and legal holidays excepted, and seller agrees to make full shipments each day to the (2561) extent of car 2373 supply before any other shipments are made." The next paragraph reads: "The seller agrees that all cars in which coal is to be delivered hereunder shall be loaded as nearly as may be practicable to their full visible capacity." There is no provision of any kind in that contract relating to assigned cars, and no use of the words "assigned cars." So far as I can recall it, such has never taken place.

W. S. Andrews, called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. Rixey (2562):

I am transportation assistant to the vice president of the Southern Railway Company, with headquarters in Washington, and have been here in my present position a little over two years. Prior to that time I was general superintendent of transportation of the lines west of the Southern Railway at Cincinnati. In that position I had jurisdiction over the lines serving the Birmingham district and the Alabama field. I have read the testimony of Mr. A. E. Vogtle, of the Corona Coal Company. His testimony is correct that the Southern Railway system did not use assigned cars in the Alabama field from the fall of 1920 up to November 20, 1922. (2563) Prior to the fall of 1920 it was necessary to resort to the use of assigned cars to obtain fuel supply under contract in the Alabama field. We resorted to that practice in the spring of 1920, but continued it only a short time because of injunctions through the courts. After the injunctions were dissolved we returned to the practice of assigning cars, so that for practically six or eight months in 1920 we were on the assigned-car basis in the Alabama field.

By Examiner BARTEL:

That was in accordance with service order 18 of the commission.

2374 By Mr. RIXEY (2564):

During 1920, 1921, and 1922 the use of assigned cars was authorized by the car-service rules of the Southern Railway. It was not necessary to resort to the use of the assigned car in the Alabama field from the fall of 1920 up to July 1, 1922, because there was a full car supply in that field. I have examined my records recently with reference to each month during that period. (2565) As to the situation in the Alabama field after July 1, 1922, we did not assign any cars for fuel coal in the Alabama field after July 1, 1922, until about November 27. One reason for that was that on July 1 we had a very good supply of company coal in that territory, and we did not consider it necessary to assign cars. We had at that time, so far as lines west were concerned, a little over four weeks' supply of coal, 25 or 26 days—something like that. That is when we entered the strike on July 1. (2566) Then, of course, under service order 23, I think the commission said it was not compatible with its ideas that cars should be assigned for fuel coal at that time, so we, of course, respected that idea of the Interstate Commerce Commission. Our supply of nearly a month on July 1 had reduced to less than three weeks on July 31, 1922, and it continued to reduce right along week by week and month by month, until it got down to something less than one week's supply in the latter part of November. On November 20, 1922, when Mr. Vogtle testified, the fuel supply on the entire system was a little less than 5 days. On the lines west it was a little less than 7 days. (2567) Starting with October 16, the conditions indicated that because of the continued decrease in the quantity of coal on hand, it was quite evident that it would soon reach the vanishing point, so on October 16 we started in a limited way to assign cars for fuel coal in the Alabama district, with the idea of getting enough coal to equal our daily issuances, which at that time on the lines west were around 7,500 tons a day.

2375 By Examiner BARTEL:

By "started in a limited way" I mean without putting in a sufficient number of cars to take all our contracts each day. We put in a sufficient number of cars to equal our issuances, so as to hold that level of reserve which we had. We assigned cars at the entire-output mines. (2568) We do not assign cars for a day-to-day proposition. We have these term contracts running for a year, and we do not assign cars from day to day or spot coal purchases.

By Mr. RIXEY:

On October 16 and continuing for 30 days or more, we simply took enough coal from the contract mines each day to hold the supply that we had. We did that for several reasons. One was that we

wanted to give the domestic trade and the commercial trade as much coal as it was possible to give them without interfering with our own operations. (2569) The Governor of Alabama, for example, was wiring in about the coal situation in that State. He said that unless the carriers would permit the mines to load more domestic coal and would furnish cars for loading domestic coal the people of Alabama were going to suffer this winter. The industries were taking about the same position—that they must have coal in order to keep up their operations. So we contributed as much as we could to the general good by only taking a sufficient amount of coal for our daily issuances and let the rest of the coal go to domestic consumers and to industries. We kept that up until November 27, at which time we had practically a month, or a little less than a month, in which to get up our reserve for the holiday times, and at the same time our coal issuances were increasing by reason of increased business and by reason of colder weather and other things which enter into these calculations, so that on November 27 we had
2376 to start in to build up this reserve, which on the Southern Railway Lines was less than 5 days' supply on 8,500 miles of road. We started in on November 27 assigning cars to the contract mines so as to build up this reserve to get to a minimum of 15 days' supply. (2570) We would like to have at least a 15 days' supply, and it may take a little bit more than that. That is running on a pretty fine margin, even at 15 days. These were general instructions in all districts, because we were short of coal in all districts, and the Alabama field would not be able to give us enough coal to build up a 15 days' reserve in five days. The condition under which we had been working in Alabama since July 1 and during the period of car shortage had not been such as to enable us to tide over the fuel situation or to keep up our fuel supply. On the contrary, what little supply we had was gradually diminishing. Since November 27 we have been assigning cars regularly in the Alabama fields as well as elsewhere. As to whether the Southern Railway system fuel requirements could be supplied in the Alabama field under the form of contract now in force without the use of assigned cars in periods of car shortage (2571) I would say that that was impossible. My past experience has demonstrated that. We have always had to resort to the use of assigned cars in periods of car shortage to obtain fuel requirements on the Southern Railway system.

By Examiner BARTEL:

Our supply in reserve on July 1 was in both cars and stock piles. We had at that time a little more than 1,000 cars of coal on wheels, between 1,000 and 1,200. As to how long a supply that was, 1,000 cars would be 50,000 tons, and we had issuances of around 7,500 tons a day. I would say that a thousand cars would be more than we usually intend to carry on wheels. (2572) We try to get it more on to the coal chutes, and we do in some cases put some
2377 of it on the ground in order to release the cars. On July 1

we had a coal-car supply and we had our coal on wheels run up a little bit, but as our reserve went down we were taking it from cars on wheels so as to get the cars back to the mines. As to the minimum amount of coal we ought to carry on wheels on a 8,500-mile railway, you have got to have your coal ready to bring up quickly in times of emergency. We have some of our coal stations at long distances from the coal fields, and we have to anticipate that irregular conditions will prevail, so that I would say that we must always depend on having not less than 500 cars of coal.

Cross-examination by Mr. BROWN:

As to storage of coal, we endeavor to carry—we would like to carry when we can and when conditions will permit—not less than 15 days' supply of fuel; and we would like to increase that if we can, and when conditions will permit us to do that we work to that end. (2573) For more than a year up to July 1, 1922, we had a full car supply. As to why we didn't store coal in April and May when there were indications of trouble, we had this supply, as I stated, of something a little less than a month, and that seemed to be a proper amount to carry just at that time. There is a limit to the amount of coal that may be properly and economically stored. If you get to a certain point in your coal storage you get beyond the capacity of your storage space, and then you have to put it on the ground. (2574) The general quality of coal that we have will spontaneously fire after it has been on the ground, and in previous times when we have stored coal on the ground we have had severe losses because of spontaneous combustion. There is a considerable expense attached to putting coal on the ground, and another expense attached to taking it up from the ground, so that it gets entirely beyond the economical and efficient stage after
2378 you get to a certain figure which we had reached. I do not know that we are in any different situation in that respect than the Seaboard Air Line and the Atlantic Coast Line. I do not know about their conditions. As to whether in times of car shortage the carriers of the country must have sufficient coal to store, as well as for their current needs, I feel that in times of car shortage, which can not always be anticipated, of course the carrier must have enough coal to operate its trains; otherwise there would be no means of getting coal or other commodities to any consumer.

By Examiner BARTEL (2574–a):

I would not say that we undertake during times of car shortage to store coal, because that would more properly come, I should think, in times of car surplus.

By Mr. BROWN:

I said that on November 20 we had a five-day supply. As to whether at that time of car shortage I went ahead and increased it up to 15 days, we did not intend to do that during times of car shortage, because there was a hope all the time that this car shortage would

be improved; and, as I stated, we wanted to help out and meet the wishes, say, of the (2574–b) Governor of Alabama and of these industries who were calling on us to let the greatest possible amount of commercial and domestic coal be loaded, so that they could build up their reserves for the winter. They seemed to be short of coal and wanted to build up and we wanted to contribute our share, and therefore we did not undertake to build up any reserve during that period of car shortage. We had a reserve which we had built up in times of car plenty, which amounted to something less than a month which we felt was the limit of our economical and efficient storage.

By Mr. RIXEY:

It is true that as a result of the policy which I have explained and which was pursued between July 1 and October 1
2379 that reserve had dwindled until we were confronted in November with only a 3 to 5 days' supply on hand. As to whether to get coal to run our railway we had to resort to the use of assigned cars to keep it up even to a 3 or 5 days' supply, my answer is yes.

By Mr. LOOS:

As to whether we built up our 5 days' supply to 15 days', we were working toward that end. (2575) We just started that on November 27. There is still a car shortage in that territory.

By Mr. RIXEY:

We can not work on nearly as close a margin now as we can in the summer time.

By Mr. BROWN:

As to whether it would have taken much wisdom last May for me to determine that there was going to be trouble in this country along about July 1, I don't know. I have been threatened with a great many strikes during my short life, but have never experienced many of them. (2576)

By Mr. LIVERIGHT:

At the present time and since November 27 I would say that the proportion of company coal loaded to commercial coal is as the relation of 10 to 45.

D. E. SPANGLER was recalled as a witness and testified further as follows:

Direct examination by Mr. YOUNGER:

As to the testimony which has been introduced concerning the practicability of obtaining railway fuel on the basis of so scattering fuel contracts as to take only a limited number of cars each
2380 day from each mine (2577), I was impressed by the testimony given in that respect until I heard it advocated in this hearing that the ideal method for a producing carrier to obtain its fuel unfailingly would be to contract a small quantity with each mine

on its road so that the taking would amount to, say, two cars a day from each mine. I was not aware that such a plan was in the mind of anybody familiar with the railroad fuel necessities. In my direct testimony I stated that the Norfolk & Western would purchase its fuel coal from any mine that produced a coal of the character and quality it could successfully burn in its locomotives, but I had in mind all the while the necessity of arranging our fuel supply in such a manner as it would provide currently a large tonnage from concentrated territory. It seems to me obvious that dependability of supply would be sacrificed if a railroad were obliged to rely for its fuel supply upon the current shipments from each individual mine at a fixed limited rate of tonnage for each. This would necessitate unfailing service at each mine every day, which in practice is impossible, and the expense of such a service could not be justified when there are better means for more nearly approaching a stable supply of fuel. It happens in our case that the contribution to the fuel supply by mines owned by the railway company (2578) and the heavy tonnage obtained every day regularly from groups of mines whose tonnage we contract through what are known as sales agencies ordinarily provides a substantial nucleus for our current supply. These tonnages are obtained as coal from these mines reaches the weight scales at the exits of the coal fields east and west, one at Portsmouth, Ohio, and one at Bluefield, W. Va. Were it not for the dependability of this portion of the current supply, irregularity and insufficiency of fuel deliveries from scattering mines would have added materially to difficulties already experienced through defaults in deliveries on the part of a number of contractors, who take
2381 the position that the railroad-fuel contracts have no standing superior to commercial contracts which they have made, and among whom they feel obligated to prorate their reduced output when their aggregate shipments are insufficient to meet all commitments of sale which they have made, based upon what they regard to be reasonable expectancy of production. On this theory of tonnage deliveries the railway company has been obliged to confiscate at the mines large quantities of coal in recent months to compensate, as far as we could foresee at the time, for the default in contractual deliveries. It was also necessary in extreme instances to confiscate a substantial commercial tonnage after it had left the mines (2579), which is irritating and burdensome to commercial users. Had cars been assigned for railroad fuel on our partial-output contracts, the questions encountered would not have arisen, because assigned cars would have been entirely independent of cars available for commercial apportionment. The Norfolk & Western has in the past contracted with a relatively large number of its operators for part of its fuel requirements, but we have not undertaken to arrange our fuel contracts on the basis of, say, for example, dividing them up on the basis of the number of cars of coal consumed daily. We have spread our contracts for fuel over a considerable number of operators, and in our particular case that is made relatively easy because

of these sales agencies which control the output of a number of mines. As to whether, notwithstanding the fact that we have spread our contracts over a large number of mines, we have encountered difficulties in the recent past in securing our coal supplies, my answer is yes. As I was undertaking to say, the operators take the position (2580) that where they are unable to supply all of their commitments, the railroad should suffer in the same proportion that their commercial contractors suffer. As to whether when one contractor defaults
2382 in deliveries under his contract it has a tendency to bring about defaults on the part of other contractors, I can not say as to that, because we have a number of contractors who never default, and I am not quarreling with this default in the sense of saying that, perhaps, it is not good business for them to treat these contracts as they do, because they conscientiously believe that these contracts are on an even keel, and when they can not supply their commercial contractors with coal the railroads must suffer with them. We, nevertheless, do suffer in our own requirements. As to the influence of assigned cars for railway fuel upon the purchase price, the Norfolk & Western has not since 1910, except during a portion of Federal control period, used the assigned fuel car except for entire output contracts. (2581) The prices paid for fuel received in assigned cars have not differed at all from prices paid for fuel received in nonassigned cars from partial output contracts in the district where the two classes of contracts were running concurrently. Our contract prices as between districts do vary. Our sole concern is stability of supply. We will take our chances in our ability to purchase coal along with other buyers at the time, and ask no concession that does not go with volume of tonnage, low selling cost, certainty of pay, and permanency of patronage, which are always factors in the market. I am quite sure that the use of the assigned car has no effect upon the Norfolk & Western on the price we pay for coal. In our buying at the beginning of the year our guess is not always good. We sometimes buy coal at higher than what turns out to be the going commercial price. Then again we are lower than that. In obtaining our fuel contracts it has been our habit to invite bids by sending out an invitation (2582) to all mines whose coal is of a quality and character suitable for our needs.

A great many of our locomotives are equipped with stokers,
2383 and we must have for them an especially prepared coal. Others are still hand fired, which require a different character and grade of coal. The invitation as sent out last February 17 for a fuel supply for the year ensuing April 1 is on this form. It is not the detail of a contract. It is just an invitation for bids on coal, sent to everybody on the road whose coal we can use.

(The paper referred to was offered and received in evidence as Exhibit No. 129. (2583)

As to the question of heavy storage of railroad fuel in anticipation of future needs, such coal to be acquired during supposed sea-

sonal depression of the coal trade, I do not think storage of this character would be advocated for a coal-producing road circumstanced as is the Norfolk & Western, with its coal fields right in the middle of its road, and its never having had to my knowledge pronounced seasonal movements of coal. The record months on our line which have stood for a substantial period of time are from February, the shortest month in the year, to November. Some years ago the N. & W. did look into the feasibility and desirability of expanding its storage capacity at coaling-station points, but it was found that the expanded storage units would cost a great deal more than to let current productive supply of several days stand on track in cars, whether cars were taken from the current supply or cars designed and acquired especially for fuel supply. It was merely a matter of investment and expense in either case, and as no saving in this kind of extra storage facilities was apparent it was not undertaken. (2584)

By Mr. BRONSON:

I think operators on our line store coal themselves only in extreme instances, and never until recently. As to whether I have known of any fires by reason of spontaneous combustion in those coal piles, I have only known of spontaneous fires away from our railroad; none on our railroad that I know of.

2384 F. C. HONNOLD, called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. ROPIEQUET:

I have had about 18 years experience in coal operation and in connection with coal operation in the State of Illinois, as an operator for the majority of the time and the rest of the period as a representative of operators. (2586) The Illinois Coal Traffic Bureau coal operators are not now associated with the National Coal Association and were not represented here in the presentation by that association. The Illinois Coal Traffic Bureau represents coal operators operating in Illinois with an annual output of approximately 36,000,000 tons. In the presentation herein made in behalf of the bureau it is safe, however, to state that the views expressed are the views of a much larger tonnage than that directly represented by the bureau and practically that of the operators of the State taken as a whole. (2587) After a most careful examination of the various codes of mine rating and car-distribution rules proposed by the various parties to this record, we have reached the conclusion that as a basis of such code of rules no code has been presented here which for practicability improved upon the rules submitted for consideration by carriers and the representatives of the National Coal Association. We therefore put ourselves of record as approving the rules thus proposed as amended by the National Coal Association in Callahan's Exhibit No. 85 and as further amended by suggestions made by Mr. McAuliffe last July. (2589) It is our suggestion that what-

ever rules may be adopted for application may be adopted territori'ly—that is, to cover fields which are served largely by the same carriers and which are competitive with each other in the various markets they supply and wherein the mines are operated
2385 under practically the same rule, so far as labor is concerned.

(2592) As to paragrap "D" of Rule 6, as proposed by Mr. McAuliffe in July, 1922, this paragraph refers to the private cars, recognizing their propriety and the right to place them where the owner desires, but avoiding the discrimination which would result from giving the mine thus loading the cars greater pro rata running time than other mines have under the car distribution on the same system or division thereof. In this connection we refer also to the revision of rules No. 8 and No. 9 as presented by Mr. McAuliffe, which meets the assigned car situation, whether private or foreign line railroads, in conformity with coal operators' views who are opposed to the present preferential assigned car distribution, which includes the operators here represented. The reasons for the change in these rules are fully set forth in the statement of Mr. McAuliffe, which we adopt in reference thereto. (2594) We also favor an inclusion in the rules of a definite period within which discrepancies as among mines in the same district, as well as between different districts, will be adjusted, as suggested in rule No. 11 in Callahan Exhibit No. 85. (2598) In reference to the suggestion that has been made that mines will be able to produce coal at times when there is no shipment over the tipple and which they would be enabled to dump over the tipple in a comparatively few hours, and thus secure a much larger rating than they would have under ordinary conditions, it should be sufficient to call attention to the fact that this situation is an abnormal one and can generally be found only in the nonunion fields and not at all in Illinois. (2599) In this connection we would present a statement found in a letter written by Mr. G. C. McFadden, chief engineer of the Peabody Coal Company, to Mr. George Reed, of that company, in reference to the claim that mines are or might be equipped with an oversupply of pit cars to enable loading
2386 of same on idle days, thereby increasing output on days when railroad cars are furnished for loading at tipple, and in so loading to inflate car rating, which Mr. McFadden declares to be impossible and impracticable.

(The statement referred to was offered and received in evidence as Exhibit No. 130.)

This statement is a concise expression of the experience in the Illinois field, and also reflects conditions in Indiana, western Kentucky, Oklahoma, and Wyoming.

Cross-examination by Mr. BRONSON (2602):

The average production in Illinois at this time is about 275,000 tons per annum. There are 385 mines, speaking generally, in Illinois.

D. P. MORTON (2606), recalled as a witness, testified further as follows:

Direct examination by Mr. BRONSON (2610):

"Mr. BRONSON. I would like to offer now as Exhibit No. 131 a statement captioned 'Comparisons of results that would be obtained by strict following of monthly affidavits, year 1922, under the provisions of Circular C. S.–31, Revised.'"

(The statement referred to was received in evidence as Exhibit No. 131.)

(2659) "Commissioner AITCHISON. * * * I am prepared to announce that the commission is willing to enter an order to the effect that the assigned-car feature, when the parties have their testimony in, will be disentangled from the remainder of the investigation with which it was consolidated and will be briefed, argued, and submitted separately from the investigation and consideration of the mine-rating rules finally. In order to accomplish that it will be necessary to conclude the record upon the assigned-car feature as far as it is being made before me."

2387 (2664) "Mr. MCAULIFFE. With reference to the matter of storing coal, I have the figures for the Detroit Edison Company for the year 1920. If they would be informative, I would be very glad to submit them. (2665)

"Commissioner AITCHISON. Do you know what the circumstances were under which this coal was stored and how it was stored and whether it would represent a fair figure, necessarily, as to what the carriers might expect to have to pay?

"Mr. MCAULIFFE. I think the conditions were substantially those that would obtain at any point where a large volume of coal was stored. I am familiar generally with the physical situation.

"Commissioner AITHISON. Al'right. State briefly what those figures are."

[Mr. McAuliffe thereupon made the following statement.]

The Detroit Edison Company consumed at its Delray and Connors Creek plants, Detroit, Mich., in the calendar year 1920, 1,028,000 tons of fuel coal. It passed through its storage piles 283,500 tons, or 27.6 per cent. The operating expense, including operating labor, supplies, maintenance, material, and labor, totaled $142,637, or 50.3 cents per ton of coal handled through storage and 13.9 cents per ton of coal consumed. The fixed charges on tracks, locomotive cranes, excluding land and electric locomotives used in switching, totaled $32,400, or 11.4 cents per ton of coal handled through the stock pile and 3.2 cents per ton of all coal consumed. (2666) Interest on capital invested in coal stock balance, calculated on a basis of 7 per cent per annum, totaled $28,463, or 10 cents per ton of coal handled through storage and 2.8 cents per ton of all coal consumed. The total cost of the effort was $203,500, or 71.7 cents per ton of coal stored and 19.9 cents per ton of coal consumed at the two plants during the year.

2388 By Mr. BRONSON:

That included the cost of handling the coal into the storage pile and out. As to whether it was handled out in cars as well as in, briefly, the coal is brought in in railroad cars in the ordinary manner, unloaded with locomotive cranes into the stock pile. Subsequently, it is reloaded by the same cranes into cars owned by the Detroit Edison Company; moved thence to the plant and there unloaded. That 71-cent figure includes the movement into the pile and out of the pile in railroad cars. It includes every factor except switching locomotive service which is necessary where the coal is used with or without storage. (2667)

By Mr. GUTHEIM:

As to whether the coal when used in boilers is used crushed, the major portion of it comes in the form of mine-run, and is passed through crushers. A material portion, however, is purchased as screened.

By Mr. BRONSON:

I have never heard that the Detroit Edison Company suffered from stock-pile fires.

DUDLEY FARRAND, called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. CARMALT (2668):

I am assistant to the president of the Public Service Companies of New Jersey. They are plural. The Public Service Corporation is a street-railway company, and the various utilities are operated by independent companies as required by State laws. I have been in the public utility business practically 36 years. Our company owns private coal cars. They are used to transfer coal bought by
2389 us from regular operators to our own plant exclusively. (2669) We do not own mines or railways, except the terminal tracks on our property, which are rather extensive, but no right-of-way railroad. So far as I know, we have no fault to find with mine ratings and things of that sort. The rule providing for the distribution of private cars as assigned cars was the rule that was in effect, generally speaking, at the time we purchased cars. There may have been some minor modifications. I am not familiar with the technical wording but substantially the same. (2670) As to our experience during the period from 1917 to 1920, it has been, and I think it is common with most utilities, that they have been able to buy some coal, but they have not been able to keep going without prohibitive cost without the use of assigned cars. The assigned car has been the one standard remedy from years gone by. We make it a practice in our company to stock coal to the limit of storage capacity. That is done at our own plants, at each plant. The proportion of our requirements we carry as stock for the approaching winter season is 25 to 30 per cent. We begin to lay that in in the early summer

2671) when there is normally full car supply, and when the railroads are able to do it. We do it to help the railroads and do it to help ourselves. In this period from 1917 to 1920 it was absolutely essential for our company to resort to the assigned car. The only way we were permitted to operate was by the use of assigned cars. The only other effective remedy than assigned cars was the case of coal commandeered during the war to maintain essential war industries. We bought our private cars in 1920. At that time we were right in a car shortage, the worst known up until that time. (2672) We had resorted to the purchasing of spot coal in all ways, all kinds and lots, and at terrific expense. As to the cost to us, I filed with the commission
2390 during that strenuous period in 1920—I have not the detailed figures here, but it cost us approximately one and one-half million dollars, not for coal, but over and above what our own coal would have cost had we been able to get it by the usual means. In that one and one-half million dollars I did not include anything for the failure to get the quality of coal that we had under previous practices. That is just the average price, the increase. As to the quality, that was something that was simply heartbreaking. It was all kinds of stuff under the name of coal; and it is very difficult to operate power plants with variable quality. There are plenty of instances where it is done (2673) but even substituting coal which is relatively good will make a variable in your operating. In this case it was not because we had equal quality—the quality of some of that coal was simply abominable—but we had to take it because it was the only thing between that and shutting down. That is not included in the million and a half cost to us above our contract price for coal which I have referred to. When we were confronted with that situation our company made arrangements to purchase private cars. We had to start in from the early part of that car shortage, and it came to a head some time in the early summer. We had in mind the question of "millions for defense but not one cent for tribute." We would rather pay it for the sake of having these cars than to pay it in exorbitant prices for coal, which was the only means of getting anywhere. (2674) In our case it was particularly emphasized over a large part of the utility field, because we had the exclusive output of certain mines, practically enough to keep us going. If we did not get that coal, no one else could get it. That coal was not sold on the market at any such prices, because we got every pound that came out of those particular mines, 100 per cent. As to whether we bought cars as insurance that we would get our contract coal, we agreed
2391 among ourselves that we would purchase a certain number of cars if we could receive proper assurance that those cars could be kept under our exclusive control against the ordinary public or other business. As to what I mean by "proper assurance," I tried to find out what the rule was on that and took it up with the Interstate Commerce Commission informally and later in writing. I had several conferences with the presiding commissioner, and I think

he will recall some of the circumstances. I have a copy of the correspondence that immediately (2675) preceded the letting of the contract for cars. Here is a carbon copy of the original statement to the commission and the commissioner's reply, dated in July, 1920.

Commissioner AITCHISON. What do you claim for this—that the commission is estopped, or who?

Mr. CARMALT. I think not. I think it shows what the situation was at the time that the cars were purchased, and the record would hardly be complete without that statement.

Commissioner AITCHISON. I have no objection to the letters going in, of course.

Mr. CARMALT. I offer it as Exhibit No. 132.

Commissioner AITCHISON. Nobody connected with this commission gave you any assurance that this rule was going to stay in effect?

The WITNESS. No, sir. We had nothing except the letter in question. Beyond that letter I think all the negotiations were verbal. I was directed by my company to get such reasonable assurance as I could that if we purchased these cars we could use them for our own use and benefit, and we have so used them ever since, confining them exclusively to our own coal.

Commissioner AITCHISON. But there was no assurance given you (2676) with respect to how they would be counted against
2392 a mine in the way of an allotment of cars to commercial mines?

The WITNESS. No; the mine rating was not changed.

Commissioner AITCHISON. That was thoroughly understood?

The WITNESS. I think so. We received no preferential treatment in the handling, but we had cars to use.

Commissioner AITCHISON. The only question was whether, under the existing rules as they then were, you were entitled to the exclusive use of those cars. Is not that the case?

The WITNESS. Yes; as I understand it.

Commissioner AITCHISON. And the question was not as to whether the cars should be counted against the mines or whether they might exceed the commercial allotment? Is not that the case?

The WITNESS. I think so.

Mr. CARMALT. The two letters indicate rather definitely just what the understanding was.

Commissioner AITCHISON. It indicates what was in here, but he said he had assurances, verbal and otherwise, and I wanted to develop just what they were, inasmuch as he had quoted me.

The WITNESS. I said we should use the cars for our own exclusive purposes, and that was the only assurance. Am I not right? (2677)

Commissioner AITCHISON. And the matter of whether they should be counted against the mine or not was not the subject of your discussion?

The WITNESS. That is right.

Commissioner AITCHISON. And, of course, it was clearly given to you to understand——

The WITNESS (interrupting). I understand this, Mr. Commissioner,
I am not a lawyer, but I did understand that after we spent so
2393 much money for buying cars we could use them for the pur-
poses and benefits understood at the time of their purchase. I did not suppose——

Q. You were inquiring what the rule was, and you were told then what the rule was, as it then existed.

The WITNESS. I was certainly given to understand that our cars would not be confiscated for the benefit of the public. Was I not?

Commissioner AITCHISON. No; you were not.

Mr. CARMALT. I do not propose to go beyond the definite statements in the correspondence.

By Mr. CARMALT:

Following the placing of the order for the cars, we did not get them right away. The delivery was slow. (2678) We began getting them under the contract of purchase about the first few days of December of that year. Service order 21 was the last of a series of orders of similar purport, but of different details, starting, I think, early in July, under which assigned cars were furnished for utility fuel. Under 21 we did not, and so far as I know, no other public utility received a pound of coal.

By Commissioner AITCHISON: (2679)

During the period of 1920 the public service companies got their coal with assigned cars until the final abandonment of the practice. As to when that was, No. 21, as I recall, was issued some time in October and cancelled in November. My recollection is that we did not receive a pound under 21—that is, after that order went into effect. (2680) As to whether our company provides any other facilities or service than the cars themselves to the carrier, we provide
our own receiving yard and terminal. I did not hear the testi-
2394 mony as to the absorption by private cars of more than their
proportionate share of the motive power and facilities during the fall and summer of 1922, but I do not see how that could well be, because it must be more economical to the railroad to handle its cars in as near trainload lots as we can make them, than in scattered lots of 1, 2, or 3, or some other number, as ordinary shipments are made.

By Commissioner AITCHISON:

As to whether those shipments come through pretty promptly, as a matter of fact, they come through very well; but I do not know that they are any different from the coal received in system cars.

By Mr. CARMALT:

I have no way of checking that.

By Commissioner AITCHISON:

As to whether our coal has come through in private cars, more steadily than when shipped in system cars alone, I do not think there is very much difference, with the exception, as I say, that we try to handle it from the mines in as near trainloads as it can be, and there is necessarily less shipping, and we get the benefit of that. Other than that, I do not think there is any difference.

By Mr. CARMALT (2681):

Whenever there is a shortage of motive power we have the same trouble as any other company, as far as I know. As to whether that is a constant trouble in the handling of cars, that is normal with railroading.

Cross-examination by Mr. BROWN:

The 600 cars we purchased were sufficient to secure our supply of coal at our plant. They have been working very satisfactorily.

We use some system cars, because those care are owned in the
2395 name of our electric company, which uses almost exclusively steam coal. Our gas company uses coal which comes from a different region. (2682) We operate all over the State. Those 600 cars are for different plants all the way from Camden to Jersey City. We confine the cars as near as possible to one railroad. A large number of our plants are on the Pennsylvania road, and we try to confine those cars to mines on the same road. It simplifies the matter somewhat.

By Mr. BALLARD:

We get all our coal in railroad cars. A number of our plants have actual water delivery. Perth Amboy is across the bay from South Amboy. They call it delivering at the Pennsylvania pier at South Amboy, but it is towed across. I could not tell how much coal we get in system cars as distinguished from our own cars. I do not keep details on that matter; but we have only been working with our own cars for less than two years. I cannot say how much coal we got by rail in those two years, roughly. (2683) It all comes by rail excepting during last summer we bought English coal and everything, to keep going. As to how many of our plants use coal that comes in our own cars, I could not answer. We have 11 electric and 8 gas plants, and various railroad plants. I do not mean to be understood as saying that everyone of those plants used coal which was hauled in our own cars. I said definitely not in reply to [Mr. Brown].

By Mr. LIVERIGHT:

Most of our coal did come from central Pennsylvania before the first of April of this current year, but this year we have been forced to buy coal where men would work, including England. (2684) As to whether these private cars have customarily plied between

Cambria County, Pennsylvania, and the points of consump-
2396 tion. I do not know Cambria County, but central Pennsylvania fields. It happened that our contract for the largest amount was with Barnes & Tucker for steam coal. They had been furnishing us coal for a period of years before the introduction of these private cars. We have been dealing with them off and on for 18 to 20 years. As to whether we found their service pretty satisfactory, without the assigned cars or private cars, we could not get along without buying coal at prohibitive prices, as I just related. In 1920 it cost us a million and a half, and during the war it cost us all kinds of prices. There was coal, but we could not get it. As to whether we had a long-time contract with Barnes & Tucker, we never had any contract for more than 5 years, and they have clauses for wage changes and things of that sort. It was one of those things you could continue or drop at the end of the 5 years. (2685) We did not find that the contracting party diverted its coal to other purposes as against us. In the last 7 or 8 years we had exclusive output from about 7 mines, I think. As to "stocking" 25 to 30 per cent of our requirements—in fact, we had that amount last year—for the winter freeze-up, and we had practically that or a little more, everything we could crowd in, as of March 1, in anticipation of a shut-down. We had all we could hold in 1920. As to what proportion that was of our needs, any healthy utility is a growing, flexible thing. It depends. Following the war and the business depression of 1919, we had coal coming to us that we could not use. We had to pile it up. It was more than we normally would have had at the beginning of the 1920 trouble. We stored it during the summer time. We kept our contracts and took our coal right along. (2686) 1920, I think, was one of the worst shortages we ever had. We did not store coal during that summer.

We store every summer when we can get it, but do not store
2397 it in any car-shortage period. I did not say we stored coal at the instance of the railroad, except in a general way. We know that the railroads are able to handle a good deal more coal with the same equipment in summer than they are in winter, when the switches are frozen. As to whether we care for any preferential allotment of motive power (2687), we have never asked for any such.

By Mr. McAULIFFE (2690):

Our annual consumption is about one million and three-quarter tons. With respect to assurance from the railroad company that they could handle our cars, there was nothing in writing. Our transportation people conferred with them in the matter. We have a written agreement. I never handled it, but I know it is a written operating agreement. (2691) The number of cars constituting a trainload would depend on where it is. If it is up in the Altoona district, I imagine it would be about half what it would be in New Jersey. I would not want to say what that would be. As to the purchase from

7 mines, we were talking about the 1920 situation then. That mine purchase is a regular kaleidoscope. This last year we moved 1,170 tons during the recent shortage. We are now negotiating for new contracts.

(The letters previously offered were received in evidence as Exhibit No. 132.)

J. W. ST. CLAIR, (2694) called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. FREDERIC L. BALLARD:

I am assistant traffic manager of the Cambria Steel Company, Johnstown, Pa. That company is a subsidiary of the Midvale Steel & Ordnance Company. The Union Coal & Coke Company is
2398 also a subsidiary of the Midvale Steel & Ordnance Company.

I have been located at the Cambria Steel Company's plant nearly 20 years, and prior to occupying my present position I was assistant superintendent of transportation, chief dispatcher, and so on. My duties have had to do with transportation to and from the plant. (2695) Our plant is a very large one. We have a number of blast furnaces, open-hearth furnaces, by-product coke ovens, and many of the usual steel-producing units which go with a plant of this kind. We produce a large variety of steel products, almost everything having to do with steel and ordnance products. The use of individual cars, in so far as the Cambria Steel Company is concerned, is primarily to protect the coal supply for its by-product ovens. Our development of by-product coke ovens has been of recent years, although we have been producing some coal for a period of about 25 years. Prior to the last 10 or (2696) 12 years, our coke had been coming to us mostly from the Connellsville region, and was what was then known, and is still known, as beehive coke. The latest developments in the manufacture of coke have demonstrated scientifically that the by-product oven is an improvement over the beehive process; and in line with other large steel producers we have attempted to protect ourselves in our coke supply by by-product oven production at our own plant. Our plant is virtually self-sustaining in the production of coke by means of by-product ovens. We can produce more pig iron than we can produce coke for at this time; but we are not buying any outside coke for the Cambria Steel Company at present. Since 1918 we have built 238 new by-product ovens, with very extensive plans or facilities for the extraction or preservation of by-products, representing an investment of some $20,000,000. In addition to coke (2697) we use all our coke-oven gas and all our
tar from the by-product plant at the present time. If our
2399 ovens were located at the mine, and not at the plant, we could not use the gas without piping it, and that is not good practice, and we could not use the raw material to advantage. The economic process is to work the raw materials and produce them where you can deliver them to your points of consumption by other than rail-

road methods. With the increase in the production of coke or the requirements for coke, it was necessary for us to procure a coal supply, which we did in Washington and Westmoreland Counties, Pa. We own mines there. They were purchased at the same time that the coke ovens were increased, as part of the same general project. It was at that time that we also procured cars; and they were procured as necessary for the operation of the coke ovens and the delivery of the coal to the coke ovens. (2698)

By Commissioner AITCHISON:

This project was first put on around 1917 or 1918. The ovens and by-product plants were completed in 1920. Construction of the ovens was begun in 1918. As to other forms of industry that have gone into the by-product coke business, as far as I know there are concerns which are engaged entirely in the production of by-product coke. I think they serve a good many municipalities or cities with gas. The Ford Motor Company, as I understand, have their own blast furnaces; you do not have much use for coke unless you have blast furnaces. The only other use that I know of, of any importance, would be for foundry use. (2699) Wherever there are blast furnaces you must have coke, and the by-product coke seems to be preferable to the old beehive coke, for the reason that in the beehive oven you lose all your by-products and get nothing but coke, while in the by-product coke oven proposition you can recover them all, if you have facilities for their recovery. My whole life has been spent in railroad and steel-plant employ. You cannot find another line of industry that is a consumer of coal or coke in
2400 anything like the same proportion that the steel industry is, because the steel industry is usually—the large ones in particular—built up with the idea of converting ore into finished steel; and when they do that they have taken in a number of different processes of conversion, and they are required to have coal for coke, coal for gas making purposes, coal for boiler use, and for all the other uses you can possibly put coal to. The individual manufacturer producing one line of product does not need all of the various producing units or processes of manufacture that the large steel plant uses. (2700) As to whether there are not many forms of manufacture in which a ready, dependable, suitable form of coal is just as vital to the continued success of that business as it is in the steel industry to the steel industry, I should say "yes"; but I would also say that there is not any other industry that I can think of that consumes coal in the volume that the steel industry consumes it.

By Mr. F. BALLARD:

As to how vital, aside from quality, is the regular supply of coal in the operation of by-product coke ovens, a by-product coke oven, to begin with, has to be kept heated. If it cools, you stand to lose very heavily through the contraction or expansion of your refractory lining. A by-product coke oven is lined with fire brick; and after

heating, if it cools, the chances are that the lining will have to be replaced at a great loss of time and at great expense. It is absolutely necessary to maintain the heat in your ovens for that reason. (2701) It is a facility which certainly cannot be run intermittently. It must be run until it is worn out, or until you can let the gas go off. You must keep them heated.

2401 By Commissioner AITCHISON:

As to how that differs from the glass furnace of a company which is manufacturing food containers, I am not in position to answer. I do not know anything about glass furnaces.

By Mr. F. BALLARD:

In addition to the loss of income which comes from shutting down, there is also a very heavy loss because of serious damage to the plant from shutting down in the case of a by-product coke oven. Unless you have uniform quality of coal, you cannot produce uniform quality of coke, and that affects the quality of your pig iron, which is the next process of manufacture. (2702) And if your pig iron is not of the proper quality, it stands to affect your steel. All the way through, unless you have a uniform quality of coal, you will affect your coke yield, your open-hearth and Bessemer yield, and it makes an unprofitable operation. Off-grade coke produces off-grade pig iron, and that stands to run clear through into the steel. As to how that affects the desirability of buying coal in the general market or spot market for by-product purposes, the way it always affected us when we were forced to such a measure was that we got bad coal. It made coke which was undesirable, and lots of our pig iron had to be remelted. (2703) My duties put me in personal touch with the movement of freight to and from our plant. As to the question of preferential or expedited movement of private cars as compared with the movement of freight generally, I will say that there is no difference between the movement of the individual coal car and the car containing any other commodity we get. Our cars often come in in trains mixed with system cars and other freight. In times of congestion and delay I do not notice that the effect of that is any different on our coal shipments than on our other shipments which move in private cars.

2402 Cross-examination by Mr. BROWN (2704):

There are a great number of by-product coke producers scattered all over the country. I would not say that they all use private cars, but a great many of them do. I will say probably most of them do. I think they found it necessary to use the private car to get their coal, or they would not have bought them.

By Mr. LIVERIGHT:

Our cars move to the mines of the Union Coal & Coke Company, a subsidiary of the Midvale Steel & Ordnance Company, and the Slickville mines, owned by the Cambria Steel Company. The latter

are located in Westmoreland County, and the former in Washington County. We have 1,050 cars. (2705) They are all in service. As to the distance from points of consumption to the mine, it is 100 miles to the Union Coal & Coke Company mines from Johnstown, and 40 miles to Slickville. I cannot give a definite figure as to the number of trips per month we get out of the cars that ply to the Washington County mines for this reason: There are times when it is expedient, possibly, not to release some of these cars from a plant. As an illustration, last summer when coal was scarce during the strike, we stored a lot of these cars in our plant; no cars were needed on account of the mine strike and the mines being shut down. We attempt to keep these cars moving as fast as we can, and we have worked down in certain seasons to where we got an average of 7 days, possibly. I think we have made that record. Normally our record for a round trip from Johnstown to the mines is 8 or 9 days. Sometimes it is 10 or 11 days. It fluctuates. I can not give a definite figure (2706) because, in the first place, the railroad service is erratic, and in the second place, we may not release the cars promptly. We have got in the past as much as 3½ round
2403 trips per month to and from the Washington County mines. I would say that three trips is a better figure for times like this. We get better service from the cars going to the Slickville mines. It is a better proposition for the railroads to handle than the other. It is closely located geographically, and, of course, the cars are not so long in transit. For the mines located in the Slickville district, we use the Pennsylvania Railroad, what they call the Conemaugh division, and for the Union mines they must go on to the Monongahela devision, and in going 100 miles for placement at the mines they go through another break-up point, and there is frequently a reclassification involved between Johnstown and the mine district (2707) if they are moving in conjunction with other or system empties. On the movement to the Slickville mines we do not have that break-up point, and if a solid block of cars leaves Johnstown there is no classification involved, and it simplifies the railroad's handling of the cars outside of the factor of distance. We get as much as 5 trips a month out of our cars destined to the Slickville mine. That is a very good figure. We do not have through-train service from mine to plant at the Slickville operation. There is an interruption of the trip at Blairsville, which is intermediate to Slickville. The empties move from Johnstown to Blairsville, and from Blairsville the railroad sends the empties out to the mines. Then it comes back to Blairsville for a day's work. We have a capacity at the Slickville mines of about 42 70-ton cars per day, and we load approximately to capacity, if we have the empties. (2708) The cars when loaded come down solid from Slickville to the plant without any intermediate shifting at Blairsville. A day's production at Slickville, if it is 42 cars, is virtually a train for the Pennsylvania railroad in the Pittsburgh district. It is two trains for

certain sized power, and not for others, but it is for the size
2404 utilized. When this coal is assembled at the mines and brought into Blairsville, they bring our coal in in conjunction with coal from other adjacent mines. Naturally, the Slickville coal is in a solid block. If they had 60 cars coming into Blairsville, they could not mix the 40 Slickville cars. It comes to the scales solid, is weighed solid, and classified solid, because that is the point of least resistance. It is the easiest, because the production of the mine is equivalent (2709) to a large number of cars. If that mine were running on railroad-owned cars it would be just as easy, and would be done the same way. Before we owned our own private cars we were contracting for coal largely with coal companies which owned the individual cars instead of us; and the coal naturally was taken out of these mines in solid blocks. It is always railroad practice to classify solid trains so far as practicable; and if our coal was developed in sufficient volume to warrant solid train movement it was moved that way, the same as our iron ore and limestone were. We have had experience as to system cars exclusively supplying our plant. That was in 1920 during the coal strike. In 1918, from the time of the close of the war up until the first of the year, when the Fuel Administration (2710) was making the distribution, we got coal from them in all kinds of cars from all sources. We did not have solid trains coming from the mines to the plant at that time, but from accumulation or classifying points we did get it. We got it in solid trains if it was possible for the railroad to classify it in such manner. If our coal allotment or whatever was given to us was assembled at West Blairsville, Pa.—that is a good point—it was always moved to us in drafts, or trains, if the volume was there. The same thing would be true from Pitcairn, Youngswood, or any of these Pennsylvania points at which our coal originates.
2405 If the railroad had 20 cars to Johnstown and 120 to Altoona, which is the logical terminal for eastern stuff, they naturally would put the 20 together at the starting point. There are a great many other producers of coal on the Conemaugh division where our Slickville mine is. I do not know as to the capacity of their mines, but I do know that this branch, (2711) on which the Slickville mine is located, is nothing more nor less than a main track for a number of coal-mine sidings, and that the production is heavy. As to whether it is anything more than a division for assigned-car coal, I know there is not any such arrangement on the branch. There are all kinds of individual operators who do not own cars. As to whether they get the same kind of treatment with relation to the coal originating at their mines as we get as to coal originating at our Slickville mine, if one can do it the next one does. I would say that when there is a trainload assembled at Blairsville or some other point for us, ours is the first coal moved. We are in pretty close

touch with that situation, in order to obtain plant supply if we are short. We have just as much trouble getting our coal out of Blairsville as anybody else. If ours is first out, it will move first, and if there are two train ahead of ours, the other two will move first, naturally. We have never been able to bring any pressure upon the railroads to move ours first. (2712) We have tried everything under the sun to get railroad service. We do not desire or call for any preferential motive-power service in connection with the coal from our mines. We will make urgent demands for coal if we need coal, and we will make a similar demand for anything else that we need. But that is only a part of our business, to get stuff if we know it is on cars, and we are constantly in touch with the railroad for the movement of anything we need.

2406 (2713) As to whether I would object to a rule requiring the railroad company to distribute its motive power pro rata in times of motive-power shortage, I would say that we have no objection, because we are not asking for preferential treatment; and if there were a shortage of motive power, as there is, then we could only reasonably expect our share.

By Mr. Brown:

As to whether under the orders of the Railroad Administration our private cars were confiscated, they were to some extent, and when they were we attempted to get them back into our service. In other words, when we had a record of their moving to other destinations than those to which they were assigned we protested and got them back as soon as we could. The rule of the Railroad Administration did not apply to private cars, but in the demand for coal, particularly railroad-fuel coal, they took them. That is the way they got them.

C. D. Boyd (2714), called as a witness, having been duly sworn, testified as follows:

Direct examination:

I am traffic manager of the Harlan County Coal Operaters' Association, the Hazard Coal Operators' Exchange, and the Southern Appalachian Coal Operators' Association, which position I have held for nearly four years. (2715) Prior to that time and for nearly four years I was the general coal and coke agent of the Louisville & Nashville R. R., and for ten years prior to that time general freight agent of the L. & N., located at Knoxville, Tenn., and on my section of the line the mines on the Knoxville and Cumberland Valley divisions were located. I was engaged continuously in railroad traffic work, in official and clerical positions, for a period of 36 years. These associations are members of the National

2407 Coal Association, and I am a member of the railroad relations committee of the National Coal Association, but I am

not authorized to speak for that association. I am authorized to speak for the individual associations which I represent. I heard the testimony of Mr. Jones, of the Central Pennsylvania Coal Operators' Association, and there seemed to be some doubt as to a method by which the available transportation facilities of the carriers could be apportioned among the users of privately owned cars. With that in mind, I prepared this so-called rule, which I introduce as Exhibit No. 133.

(2716) (The document referred to was received in evidence as Exhibit No. 133.)

This rule was prepared for the purpose of developing what I understood to be the position of the users of privately owned cars; that is, that they did not expect to obtain more than their pro rata proportion of the available transportation facilities of the carriers. In the Harlan district, which I represent, there are located the mines of the United States Coal & Coke Company, which have been very greatly developed. It is my information that they have loaded in one day 180 cars. The Wisconsin Steel Company likewise uses privately owned cars, also the Melcroft Coal Company, which is a subsidiary of the Koppers Company, and the Ford Motor Company is about to use private cars, if it has not already placed them in service. Those are four large producing companies and the transportation facilities on the Louisville & Nashville are restricted. I doubt if they can handle, on the average, more than 900 loads a day from the Cumberland Valley division. The question of the use of these assigned cars has given (2717) us a great deal of concern. In 1920 we filed a complaint with the commission, The Hazard Coal Operators' Exchange and others v. The Louisville & Nashville R. R. Co., in which we alleged that the L. & N. had not properly

2408 equipped itself to function efficiently as a common carrier, and in that complaint we referred to the operations of the United States Coal & Coke Company, as to which at that time, as I figured it, its mines had a rating of approximately one-sixteenth of the entire mine rating capacity of that district, and they were receiving about one-eighth of the transportation facilities of the company. This rule I submitted in a conference, about another matter, with the L. & N. president, Mr. Mapother, and Vice President Evans, last Saturday a week ago, and asked them casually of a rule of the character of that which I have drawn up. Mr. Mapother stated that he did not see any material objection to it; that it was practically in accordance with their practice at the present time. Mr. Evans did think it might interfere with the movement of empty private cars to the point from which the empties were distributed into the coal fields; but other than that I do not recall any objections that were expressed. (2718) As I see the rule, it would restrict the users of private cars to their pro rata share of the available transportation facilities of the carriers.

By Mr. LIVERIGHT:

I think the L. & N., particularly recently, have endeavored to restrict the use of privately owned cars. There have been in the past numerous cases in which we have felt that the commercial mines did not receive their proper share of the facilities that were available. As I say, we filed a complaint in which we alleged that in 1920. It was withdrawn because, before the case was assigned for hearing, the situation changed to such an extent that the coal car supply was entirely adequate and continued so for a little over a year. But that was due to the lack of demand for coal generally in the year 1921; and it can readily be seen, that unless some restrictive measure were adopted, having in mind the capacity of these four large companies with an enormous production of coal, the facilities of the L. & N. would be almost entirely utilized in their service.

2409 Cross examination by Mr. BRONSON:

If a trainload of empty coal cars, including private cars, were on the way back to the mines and a coal-car shortage should develop, my view is that there should be an equitable distribution of the available facilities of the carrier. I am talking about power and facilities of that character other than cars. I can see no objection to moving these empties from connections with the L. & N. to yards like those at Corbin and Loyal and other points where the L. & N. hold the empty cars before they send them into the mines. The point of my rule is that they should not be placed at the mines when there is a lack of transportation or a lack of motive power, or congestion, lack of side tracks and things of that kind. (2720) As to moving cars to the mines under rule B, my opinion is that it would require the power of the carrier to move them up to the mine, and that power should be distributed among all the users of open-top equipment equitably. If they moved the private cars when offered, even if they held them on the mine track, that would take so much mine power. As to whether these rules are only intended to apply during car-shortage periods, they are not. I think it would be proper to apply the rules at all times when there is a shortage of transportation facilities (2721) other than cars. If a trainload of empties was returned to the mines and that train had a number of private cars in it, and the motive power became insufficient, the private cars should be set off in the same hold yards that the supply of empty system cars is set off in.

By Commissioner AITCHISON:

In case they were turned over from a foreign line we would have them refuse to receive them, if the shortage became so serious. On privately owned cars the per diem would not apply. It is so much per mile. This rule applies to privately owned cars.

2410 My opinion is that it should also apply to foreign fuel cars. (2722) In such case there is a per diem charge. As to what

I would do with that as between connecting carriers, it would be unfortunate for the carriers, but it is done every day. My information is that there are 1,500 loads on the line today between the L. & N. mines and Cincinnati. The L. & N. states that that is because of the inability of connections between Louisville and Cincinnati to accept the coal.

By Mr. BRONSON:

Observance of that rule would not increase the congestion in some instances. I think it would increase the proper distribution between users.

By Commissioner AITCHISON:

As to the necessity for these three rules, if the existing distribution rules should be so modified as to provide that the private assigned car should be counted against the mine, and that it should not be placed in excess of the pro rata share, there would be no occasion for such a rule under those conditions.

By Mr. CARMALT:

(2723) I think it is always a temptation to the carriers to move private cars more promptly because of the fact that more cars may be placed with the same motive power in solid blocks than can be when distributed in small numbers among a large number of mines. I believe private cars can be handled in solid blocks perhaps quicker than system cars. However, if all of the operators in the Harlan County field were to provide themselves with privately owned cars, I think it would be confusion worse confounded, because there is a certain amount of delay on the part of the railroad in moving private cars, because they are taken to certain designated mines,
2411 and if they are mixed up with the other cars, they have to be taken out; whereas with system cars they can be dropped along the line as they pass the mines. The same would be true of the foreign-line cars as with the privately owned cars, when in a mixed train of privately owned and foreign-line fuel cars. (2724) I do not know whether the delay caused by taking the cars to the particular mines is more or less than the delay which is necessary in switching cars to the greater or lesser number of mines. As to the expression in this rule "which can not be placed at the mines because of insufficient motive power, congestion, lack of facilities or other causes * * *" I mean other railroad disabilities and think "other railroad disabilities" would be more explicit.

By Mr. BRONSON:

I think the rule ought to be applied in any period when there is a shortage of motive power, congestion, lack of equipment or other facilities, although there may be an ample supply of system cars for distribution at mines. It would not apply if you had a period of

car shortage and there were ample facilities other than cars to handle the traffic. (2725)

By Commissioner AITCHISON:

There is a car shortage sometimes during a period when two weeks before you may have a car surplus.

By Mr. BRONSON:

This rule is intended to apply to the originating carrier and not the connecting carrier. As to how the originating carrier would know what the car shortage or power situation was on the Pennsylvania, I think each railroad knows its own disability. Certainly a carrier, the connection with another carrier, frequently places hold orders. It may be caused by lack of power to move the empties; it may be caused by anyone of a dozen reasons.

2412 (2726) It seems to me they should treat those privately owned cars equitably and not give them any more than their due share of the Pennsylvania's facilities. I am talking of the railroad on which the mine is located, because that is the railroad that serves the mine. As to what would become of the cars of the Grand Trunk if it started a movement of cars and the Pennsylvania found that, through lack of motive power, it could not supply all the mines with a hundred per cent, it has been my observation and experience that a motive-power shortage more frequently appears on the branch lines and in the coal fields themselves than at the point of interchange. Power has to be shifted frequently from the division on which large terminal points are located to these branch lines that serve the coal mines. I think that the difficulty at the point of inerchange between the railroad serving the mines and the connecting carrier would be very much less than in the coal fields themselves.

By Commissioner AITCHISON (2727):

I think the railroad under my rule would have to lay a partial embargo.

By Mr. BRONSON:

My rule could not work out to a mathematical nicety, but the superintendent of transportation, for example, on the Cumberland Valley division, on which the mines of the Harlan County operators are located, knows every day what his power condition is. When they commence to move the empty cars from the yards in which they are held to distribute to the mines, he knows how many empties he is going to be able to take out and can apportion them.

By Mr. CARMALT:

I think that the available equipment should be apportioned
2413 in terms of the number of cars placed, that is, not place, at the mines using the privately owned cars, cars in excess of the distributive share of mines using commercial cars on that day.

(2728) The first paragraph of my rule refers to empties; the second refers to the car after it has been loaded. As to why a distinction has been drawn between loads and empties, this is because in the case of empties we have a known quantity. We have the percentage of available empty cars for distribution among the commercial mines. After the cars are loaded you haven't a factor of that kind to go by. You have no percentage as you have in the case of cars ordered and cars furnished. As to saying that a greater number of cars can be handled with the same motive power when handled in solid trainloads, I qualified that to some extent. It has been our experience in the past that preference has been given. (2729) The owners of private cars, after they are loaded and when they are empty, have men in the field whose duty it is to constantly watch those cars. Mr. Schuman, of the Wisconsin Steel Company, and Mr. Moses, of the United States Coal & Coke Company, spend a good deal of time on the roads trying to get cars moved, both loads and empties. They have delays to private cars, but not to the same extent as upon commercial cars. (2730) The only service I see that private cars can furnish the carrier is that they do move in solid blocks, usually, if the mine is large enough to do it, and the carriers maintain that that is an advantage, in that they can move them more promptly, and I expect usually do. As to whether we had any complaint this past summer that the L. & N. was using its motive power particularly to handle private cars, we have periodically made complaints of that character, and I think we did last summer when the situation got to be pretty bad. I think we did complain that the United States Coal & Coke Company, particularly, had more than its due share of available transportation (2731) facilities of the L. & N., keeping in mind always that the potential capacity of the mines in that district is undoubtedly in excess of the transportation facilities of the L. & N.

2414–2415 By Mr. BRONSON:

The percentage of cars referred to in the first paragraph of the rule refers to the average car supply of the division. It could be utilized in case of distribution under the round-robin system. As to whether the superintendent or the car distributor often does not know on a given day what his actual percentage of car supply will be for several days afterwards, I think they know. They tell us immediately after it happens, and I think they know when it is going on. It has been my observation and experience (2732) that the division superintendent knows how many cars he has available for distribution, and that if they are not in his immediate possession he knows how many will be there within a short time and available for distribution; therefore he does know what his percentage will be, and that rule will be entirely workable under these circumstances.

By Examiner BARTEL:

I do not think that under my rules a placement of private cars in excess of the distributive share would be equalized later, but I think it should. (2734)

Mr. BRONSON. * * * Certain testimony was introduced by Mr. Smith relating to certain particular cars which moved from the New River mines, the New River Colliery Company, and I believe also the McKinney Steel Company on certain particular dates. If agreeable to you, Mr. Commissioner, I would like the privilege of filing a statement showing the consist of the trains in which those private cars on those particular dates moved, giving the number of all the cars in the train and the dates upon which those cars were loaded at the mines.

I would also like, with respect to the particular cars which were moved from the Berwind mines to the Great Lakes, to furnish a statement giving the reasons or the orders under which those cars were moved.

2416 Commisisoner AITCHISON. You might also, included in the statement as to any cars consigned to the Lakes, give the dates on which they were loaded and information as to any which were standing on your line at the time those were moved.

Mr. BRONSON. Very well, sir.

(The following letter, with statements attached, was submitted by Mr. Bronson:)

Exhibit in evidence

THE CHESAPEAKE & OHIO RAILWAY COMPANY,
Richmond, Va., January 9, 1923.

Mine Rating and Car Distribution Cases—I. C. C. Dockets Nos. 13896 and 12530

Mr. GEO. B. MCGINTY,
Secretary Interstate Commerce Commission,
Washington, D. C.

DEAR SIR: The record shows, pages 2350 to 2361, and page 2734, that certain information was to be filed by this company relating to certain particular Berwind private cars moving from the New River mines and McKinney private cars moving from the Big Sandy district.

I now enclose:

1. Copy showing consist of train, extra 824, containing Berwind private and other cars moving out of Thurmond, W. Va., on November 12, 1922.

2. Copy showing consist of train, extra 763, containing Berwind private and other cars moving out of Thurmond, W. Va., following extra 824 November 12, 1922.

3. Copy showing consist of train, extra 834, with McKinney and other private cars arriving Russell, Ky., December 3, 1922.

4. Copy showing consist of train, extra 801, immediately following extra 834 out of Shelby, Ky., December 3, 1922.

5. Copy showing consist of train, extra 748, moving out of Shelby, next ahead of extra 834.

These statements do not indicate that the time consumed between the loading time at the mines and the departure time from the assembling points, or the scale yard, was relatively any greater in the case of cars other than private cars than in the case of private cars.

Commissioner Aitchison suggested, page 2734, that statements might be furnished showing the dates on which all cars consigned to the Lakes were loaded and standing on the line at the time the trains containing the Berwind cars moved to the Lakes.

2417 No daily inventory is taken by car numbers, making it impracticable at a subsequent date to determine all loaded cars standing on particular dates. It is possible that this information might be furnished, but the work of locating and tracing each car is so great that to furnish the information would, I am advised, take a considerable time and entail a very considerable expense.

In this connection authority was granted me to furnish information concerning the reasons for the orders under which the particular 200 Berwind cars were diverted from tidewater to the Lakes. This matter has been taken up with Mr. Berwind and the information will be furnished as soon as it can be obtained. In the meantime, I attach copy of letter from Mr. H. M. Griggs, manager, Coal & Ore Exchange, Cleveland, Ohio, having reference to these particular cars.

At the time the Berwind cars were moving to the Lakes our transportation department was giving preference to Lake coal, under authority of a telegram, copy of which follows:

CLEVELAND, OHIO, *Nov. 7, 1922.*

"W. L. BOOTH,
"*C. & O. Railroad,*
"*Richmond, Va.:*

"Anticipating close of Lake navigation, there will be no objections to giving Lake coal preference over other coal.

"B. S. ROBERTSON,
"*Service Agent, I. C. C.*"

Yours very truly,

W. S. BRONSON, *General Attorney.*

418 *The Chesapeake and Ohio Railway Company—Consist of Extra 824, containing the 21 N. R. P. cars which moved out of Thurmond, W. Va., on Nov. 12, 1922, referred to by inspector Smith, whocing [showing] date of loading at the mines*

Initial & car number	Date loaded at mines	Destination	Initial & car number	Date loaded at mines	Destination
N. R. P. 1589	Nov. 8	Toledo.	D. L. W. 36701	Nov. 8	Cincinnati.
1773	8	"	Pa. 870215	6	Cleveland.
1545	8	"	C. N. J. 80076	6	St. Louis.
1936	8	"	N. Y. C. 41315	6	Pittsburgh.
1329	8	"	C. & O. 23357	8	Toledo.
1239	8	"	N. Y. C. 335911	8	Lacrosse.
1611	8	"	C. & O. 74304	8	Chicago.
1653	8	"	C., B. & Q. 73854	8	Waterloo.
1938	8	"	C. & O. 52560	8	Chicago.
1820	8	"	35626	6	New Albany.
1508	9	"	27197	6	Detroit.
1122	9	"	35549	6	Louisville.
1467	9	"	R. F. P. 3015	6	Louisville.
1942	9	"	C. & O. 25312	6	Pittsburgh.
1963	9	"	37681	6	Chicago.
1657	9	"	B. & O. 46413	8	"
1243	9	"	B. & O. 322794	6	"
1538	9	"	A. C. L. 80421	8	Russell.
1567	9	"	81139	8	"
1376	9	"	C. & O. 35417	8	"
1788	9	"	St. T. X. 1389	7	Hawthorne.
C. & O. 54981	7	Chicago.	C. & O. 21896	7	"
59308	6	Bowling Green.	M. C. 30440	8	Bellville.
29508	6	Chicago.	G. T. 213515	8	Litchfield.
62125	6	Lacrosse.	N. Y. C. 223928	8	Quincy, Ill.
W. M. W. 6391	6	Toledo.	S. L. 132986	6	Chicago.
C. & O. 55067	6	Grand Rapids.	C. & O. 50387	6	La Crosse.
55436	6	Chicago.	C., M., St. P., M. O. 20092.	Oct. 30	Milwaukee.
62229	6	"	Wab. 65685	Nov. 1	Russell.
15010	6	Lacrosse.	L. & N. 101629		Chicago.
E. J. E. 20579	1st	Ind. Harbor.	C. & O. 1203	Nov. 9	Russell.
C. & O. 28156	1	" "	5218	9	"
24788	1	" "	Big 4, 44180	10	Mishawaka, Ind.
29359	6	Mason City, Ia.	B. & O. 185226	10	Three Rivers.
27715	6	Saginaw, Mich.	Erie, 71447	10	Kokomo, Ind.
59126	Oct. 21	Ind. Harbor.	A., T. S. F. 39624	10	Toledo, O.
56714	Nov. 4	Columbus, O.	Pa. 581156	10	St. Louis.
63405	6	Chicago.	C. & O. 8791	9	Russell.
45149	Oct. 31	"	45099	6	Charleston.
Pa. 384571	Nov. 7	Toledo.			
L. E. W. 43819	7	Plymouth, Mich.			

RECAPITULATION

Berwind (private) cars	10	loaded	November 8th
	11	"	" 9th
Total	21		
Other cars	1	"	October 21
	1	"	" 30
	1	"	" 31
	4	"	November 1
	1	"	" 2
	24	"	" 6
	4	"	" 7
	13	"	" 8
	3	"	" 9
	5	"	" 10
Total	57		

2419 *The Chesapeake and Ohio Railway Company—Consist of extra 70, which was picked up at Thurmond, W. Va., following Ex. 824, November 12, 1922*

Initial & car number	Date loaded at mines	Destination	Initial & car number	Date loaded at mines	Destination
N. R. P. 1905	Nov. 10	Toledo, O.	C. & O. 51034	Nov. 11	Pittsburgh.
1060	10	"	59001	11	"
1451	10	"	57725	Oct. 18	Cleveland, O.
1740	10	"	53415	Nov. 10	Toledo, O.
1585	10	"	59008	Nov. 8	Toledo.
1105	10	"	22430	8	"
1138	10	"	62735	8	"
1067	10	"	30219	10	"
1980	10	"	52518	11	Pittsburgh.
1617	10	"	52104	11	"
1142	9	"	59678	11	"
1931	9	"	53575	11	"
1194	9	"	P. & R. 73038	11	"
1050	9	"	C. & O. 58552	11	"
1137	9	"	61038	11	"
1417	9	"	22951	Oct. 14	Dayton, O.
1470	10	"	H. V. 124429	15	"
1407	10	"	C. & O. 21377	Nov. 9	Chicago.
1859	10	"	22253	9	"
1748	10	"	21740	9	"
1645	10	"	24336	9	"
1832	10	"	60319	9	"
1767	10	"	13863	9	Cleveland, O.
1311	10	"	B. L. E. 11655	10	Grand Rapids.
1976	10	"	H. V. 24483	10	Chicago.
1396	10	"	C. & O. 26954	Oct. 12	Russell.
1570	9	"	29585	Nov. 8	Kewoni, Wis.
1237	9	"	C. N. J. 34616	9	Russell.
1901	9	"	V. R. R. 6717	----------	
1056	8	"	C. & O. 2877	----------	
1506	8	"	62436	8	St. Louis.
1870	8	"	60035	----------	Quincy, Ill.
1888	8	"	A. T. S. F. 43146	----------	"
1054	8	"	D. H. 22774	----------	Belleville, O.
1431	8	"	P. L. E. 32711	10	Detroit.
1065	8	"	D. L. W. 38414	11	"
1260	8	"	G. T. 20466	11	Crystal.
1867	8	"	58451	Oct. 26	Ashland.
1455	8	"	M. K. T. 33156	Nov. 11	Bardstown, Ky.
1589	8	"	M. S. R. 8394	10	Charleston.
C. & O. 55701	Oct. 12	"	H. V. 127751	2	Cedarville.
50155	12	"	S. L. 36122	Sand	Charleston.
50697	Nov. 8	Calum.	C. & O. 54235	Slag	Logan.
59684	8	Marenett.	P. R. 78835	Nov. 11	Russell.
51342	11	Tippecanoe.			

RECAPITULATION

Berwind (private) cars	11	loaded	Nov. 8
	9	"	" 9
	20	"	" 10
Total	40		
Other cars	3	loaded	Oct. 12
	1	"	" 14
	1	"	" 15
	1	"	" 18
	1	"	" 26
	1	"	Nov. 2
	7	"	" 8
	7	"	" 9
	6	"	" 10
	14	"	" 11
Total	42		

The Chesapeake and Ohio Railway Company—McKinney steel cars, Big Sandy division, referred to by Inspector Smith, having arrived Russell in Ex. 834, December 3rd, 1922, also cars handled by that train.—This train moved from Shelby Yard

Car No. & initial	Date loaded at mine	Destination	Car No. & initial	Date loaded at mine	Destination
M.,C.K.X. 628...	Nov. 27	Cleveland, O.	M.,C.K.X. 667...	Dec. 1	Cleveland, O.
730...	25	"	938...	1	"
593...	25	"	669...	1	"
936...	25	"	801...	1	"
861...	25	"	989...	1	"
781...	25	"	891...	1	"
780...	25	"	583...	1	"
772...	25	"	758...	1	"
682...	25	"	935...	1	"
690...	25	"	980...	1	"
662...	25	"	864...	1	"
702...	25	"	651...	1	"
866...	25	"	816...	1	"
875...	25	"	626...	1	"
967...	25	"	753...	1	"
809...	25	"	644...	1	"
824...	25	"	877...	1	"
771...	25	"	N.R.R. 7759...	Nov. 28	"
884...	25	"	C.&O. 72004...	28	"
901...	25	"	73442...	28	"
956...	25	"	26240...	28	"
665...	25	"	B.&O. 144155...	28	"
504...	25	"	P.R.R. 360309...	28	"
552...	Dec. 1	"	861559...	28	"
629...	1	"	N.,C.&St.L. 35556...	28	"

RECAPITULATION

cKenney (private) cars	22	loaded	Nov. 25
	1	"	" 27
	19	"	Dec. 1
Total	42		
ther cars	8	loaded	Nov. 28

2421 *The Chesapeake and Ohio Railway Company—Exta [extra] 801, which followed Ex. 834 out of Shelby, Dec. 3rd, showing car number, and dates loaded*

Initial & car number	Date loaded at mine	Destination	Initial & car number	Date loaded at mine	Destination
P. & L. E., 52145	Nov. 29	Milan, Ind.	B. & O., 325517	From S.V. & E.R.R.	Lansing, Mich.
Erie, 30507	29	Oakley, O.		"	"
K. & M., 27569	29	Cincinnati.	N. Y. C., 406391	"	"
C. & O., 222068	29	Lockland, O.	B. & O., 320573	"	"
C. & O., 55587	Dec. 1	Covington, Ky.	C. & O., 27378	"	Cleveland, O.
C. & O., 34183	1	Atlanta, O.	Erie, 28083	"	"
C. & O., 63391	1	Constantine, Mich.	Big 4, 79599	"	"
C. & O., 72966	Nov. 30	Columbus, O.	M. C., 6534	"	"
C. & O., 70088	30	Limestone, O.	B., R. & P., 40196	"	"
C. & O., 71900	30	Detroit, Mich.	B. & O., 124001	"	"
C. & O., 29370	30	Muncie, Ind.	S. A. L., 92006	"	"
C., C. & O., 20594	30	Cincinnati.	S. V. & E., 229241	"	"
C. & O., 14640	30	Piqua, O.	B. & O., 230364	"	So. Chicago, Ill.
C. & O., 20394	30	Cincinnati, O.	Erie, 18483	"	E. St. Louis.
C. & O., 12017	30	Troy, O.	N. Y. C., 407664	"	"
C. & O., 70494	30	Maysville, Ky.	B. & O., 140605	"	So. Chicago.
C. & O., 72451	30	"	N. Y. C., 333600	"	"
C. & O., 25617	Dec. 1	Ft. Wayne, Ind.	P. & R., 78178	"	"
C. & O., 61854	From S.V. & E.	Detroit.	M. P., 73086	"	"
C. & O., 54533	"	So. Chicago.	B., R. & P., 45523	"	"
N. Y. C., 405028	"	"	P. & R., 76551	"	Detroit.
B. & O., 329852	"	"	B. & O., 326157	"	"
C. & O., 61815	"	"	C. N. J., 66808	"	Cleveland, O.
P. & R., 82810	"	"	S. V. & E., 226456	"	Detroit, Mich.
C. & O., 32102	"	Detroit, Mich.	B. & O., 136184	Dec. 2	Toledo, O.
C. & O., 58121	"	"	S. V. & E., 228995	2	"
C. & O., 55830	"	Cleveland, O.	B. & O., 24998	2	"
H. V., 25693	"	"	W. & L. E., 53848	2	"
B. & O., 735999	"	"	Pa., 27851	2	Marinette, Wis.
B. & O., 224308	"	"	H. & T. C., 37028	2	Kenosha, Wis.
Pa., 12744	"	"	B. & O., 84576	2	"
B. & O., 142321	"	"	Big 4, 57067	2	Alvin, Mich.

RECAPITULATION

McKenney (private) cars	None	
Other cars	4	loaded Nov. 29
	10	" " 30
	4	" Dec. 1
	9	" " 2
From S. V. & E.	37	

2422 Left Shelby, Ky., 1.25 p. m., Dec. 2nd; arrived Russell 8.45 a. m., Dec. 3rd, 1922

The Chesapeake and Ohio Railway Company—Ex. 748, last train that moved from Shelby Yard ahead of extra 834, Dec. 3rd, 1922, showing car numbers and dates of loading

Initial & car number	Date loaded at mine	Destination
P. R. R., 322224	Nov. 27	Ft. Wayne, Ind.
296288	27	"
877177	28	Detroit, Mich.
B. & O., 239054	28	E. St. Louis.
224251	28	Toledo, O.
C., T. H. & S. E., 5711	28	Cleveland.
81368	28	Detroit.
K. O. P. X., 15524	29	Chicago.
C. & O., 74316	Empty	
P. R. R., 852823	C., C. & O.	Toledo.
P. & L. E., 43518	"	Detroit.
S. A. L., 32992	"	"
C. & O., 88675	"	Sharronville, O.
P. & R., 73617	"	"
S. L. & S. F., 67246	"	Mansfield, O.
P. R. R., 20498	C. coal	
N. Y. C., 221923	Phos.rock.	
Sou., 15520	"	
Sou., 37870	"	
K. O. P. X., 15218	Nov. 29	Chicago.
K. O. P. X., 15000	29	"
" 15838	29	"
" 15884	29	"
" 15489	29	"
" 15597	30	"
" 15497	30	"
" 15321	30	"
" 15882	30	"
" 15645	30	"
" 15196	30	"
" 15806	30	"
" 15681	30	"
" 15647	30	"
" 15478	30	"
" 15354	29	"
" 15516	29	"
" 15768	29	"
" 15460	29	"
K. O. P. X., 15157	Nov. 29	Chicago, Ill.
" 15030	29	"
" 15635	29	"
" 15531	29	"
" 15483	29	"
C. & O., 12821	28	Hawthorne, Ill.
" 34712	28	"
" 21279	28	"
K. O. P. X., 15542	Dec. 1	Chicago, Ill.
" 15734	"	"
" 15425	1	"
" 15786	1	"
" 15327	1	"
" 15416	Nov. 28	"
" 15690	Dec. 1	"
" 15772	1	"
" 15776	1	"
" 15250	1	"
" 15740	1	"
" 15998	1	"
" 15687	1	"
" 15553	1	"
" 15283	1	"
" 15162	1	"
" 15569	1	"
Pa., 305031	Empty	
M., K. & T., 81125	Charcoal	
T., St. L. & W., 6281	"	
N. Y. C., 180563	C. F. prod.	
Pa., 42472	Phos.rock.	
C., N. & W., 121910	"	
Big 4, 44828	"	
N. O. T. M., 2531	"	
N. Y. C., 151737	"	
C. & O., 13161	Dec. 1	Detroit, Mich.
" 51989	1	"
N. Y. C., 497114	Phos.rock.	"

RECAPITULATION

McKenney (private) cars	None		
Other cars	2	loaded	Nov. 27
	9	"	" 28
	15	"	" 29
	10	"	" 30
	18	"	Dec. 1
From C., C. & O.	18	"	

2423 (2736) "Commissioner ATCHISON. If there is nothing that anyone has to offer on the subject of assigned cars, with the exception of these minor matters which are to be supplied and for which there will be no hearing necessary, we will proceed.

"Mr. BALLARD. That is our situation.

"Commissioner AITCHISON. There seems to be nothing further, and the hearing will be closed as far as the assigned-car feature is concerned."

(2801) The statement offered by Mr. Gutheim, purporting to show the car distribution as between commercial and assigned cars for several weeks on the Chicago & Alton was received in evidence 2424 as Exhibit No. 135. Similar statements in respect to the Chesapeake & Ohio and the Chicago & North Western were offered and received in evidence as Exhibits No. 136 and 137. (2802)

"Mr. GUTHEIM. The next [exhibit] is a recodification, so to speak, of Mr. Galloway's exhibits brought up to date, as requested, and supplemented with the information which Mr. Galloway was asked to furnish for the record. * * *"

The statement referred to was offered and received in evidence as Exhibit No. 138. (2803)

"Mr. BALLARD. * * * I have here five exhibits which are submitted in response to requests by Judge Fletcher to witnesses of ours.

"The first one is headed, 'Additional information as to the number of men who left Rockport Coal Company during a car shortage period,' and is furnished by Mr. Tucker. * * *"

The statement refererd to was offered and received in evidence as Exhibit No. 139. (2804)

"Mr. BALLARD. The next is information furnished by Mr. Tucker with respect to coal taken by the Illinois Central from day to day from his mine, which is offered as Exhibit 140."

This statement was received in evidence as Exhibit No. 140.

"Mr. BALLARD. The next is a statement submitted by Mr. Tucker with reference to certain items of the cost exhibit which he filed and as to which he was cross-examined by Judge Fletcher. That is offered as Exhibit 141."

This statement was received in evidence as Exhibit No. 141.

"Mr. BALLARD. The next is a statement furnished by Mr. Richardson, in response to a request from Judge Fletcher with 2425 respect to the cost of a month of full running time and short running time of mine No. 6 of the West Kentucky Coal Company. That is offered as Exhibit No. 142."

(2805) This statement was received in evidence as Exhibit No. 142.

"Mr. BALLARD. The next is a statement submitted by Mr. Freeman, showing in detail the cost of the Glen Ayr mine for January, April, July, and October, 1920, in compliance with the request of Judge Fletcher. That is offered in evidence as Exhibit No. 143."

This statement was received in evidence as Exhibit No. 143.

FURTHER HEARING

OCT. 22, 1923.

"Commissioner AITCHISON. (5) Docket No. 12530, Assigned cars for bituminous coal mines, has been assigned for further hearing upon the several petitions for rehearing at this time and place. * * *"

FRANK W. HOLT (6), called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. TAYLOR:

The Erie Railroad Company and its subsidiaries contracted for 3,800,000 tons of bituminous coal for the current coal year from April 1, 1923, to April 1, 1924. (7) 54 per cent of that is contracted for to be furnished from mines on the lines of other railroads, leaving 46 per cent to come from mines on the line of
2426 of the Erie Railroad and its subsidiaries. There is a very small consumption of anthracite, probably 150,000 tons, that comes from the mines on the company's own lines. The Erie uses a standard form of fuel coal purchase contract, a copy of which I have.

(8) The paper referred to was offered and received in evidence as Exhibit No. R-1.

That contract is the form which was used for the coal contracted for from mines off line for the current coal year. The portion relating to the furnishing of cars reads: "Delivery. The coal covered by this contract shall be delivered on board buyer's railroad cars (or upon other railroad cars designated by the buyer) at the mines in such quantities as shall be from time to time designated by the buyer, it being understood that such shipments shall be made as nearly as practicable in equal monthly quantities."

I have a statement showing the tonnage of fuel coal (9) shipped to the Erie on contracts from April 1, 1923, to September 30, 1923, from mines located off the line of the Erie Railroad, the total amount of that tonnage being 960,844 tons. This statement correctly shows that tonnage and the location of the mine, the originating railroad, and the junction point with the Erie, by months.

The paper referred to was offered and received in evidence as Exhibit No. R-2.

I have also a statment (10) of empty coal cars delivered connections to be loaded with Erie fuel, on assigned-car basis, April to September, inclusive, 1923, the total number of cars so delivered to connections by the Erie being 17,295.

The paper referred to was offered and received in evidence as Exhibit No. R-3.

18,847 cars of fuel coal have been received by the Erie from connecting railroads during the same period, April to
2427 September, 1923. We have had difficulty in obtaining coal not under contract during periods of car shortage.

Cross examination (11) by Mr. Ernest BALLARD:

The Erie burns in a year 3,800,000 tons of bituminous coal. We contracted for our entire consumption this year. We serve bituminous coal mines on our line. (12) I don't know of over 10 or 12 that we actually serve. We get some of our 3,800,000 tons of coal from them. In the case of the mines on our line, these contracts do not necessarily call for the output of the mine for a year.

By Commissioner AITCHISON:

I don't think there is anything in the printed contract or in any other contract or writing, so far as I know, which says that it covers the entire output of a mine on our own line. I believe we take the entire output of the mines on our own lines for the entire period, to the best of my knowledge.

By Mr. E. BALLARD:

As to the provision in Exhibit R-1 reading, "The coal covered by this contract shall be delivered on board buyer's railroad cars, etc., in such quantities as shall be from time to time designated by the buyer," the mine is free to sell the remainder of its output commercially so far as we are concerned. We put that in there (14) to protect us from taking too much coal. Provided our consumption goes down, we want the privilege of shutting them off.

By Commissioner AITCHISON:

We have an understanding that it is only at our option whether we take the entire output or not. We have a maximum and a minimum tonnage that we will accept. When our transportation department shuts off putting cars in a mine for our loading, they naturally will give them other cars for commercial loading.
2428 That is true, to the best of my knowledge. I am not in the transportation department, and I do not know exactly what they do.

By Mr. TAYLOR (15):

Probably 40 or 41 per cent of the Erie fuel comes from companies whose capital stock is entirely owned by the Erie, the North Western Mining Exchange, and the Blossburg Coal Company, leaving about 5 per cent of our total fuel from mines on our line not owned by the railroad company.

By Commissioner AITCHISON (16):

In respect to the mines not owned by the company that, to the best of my knowledge, do not engage in commercial business at all, those mines are the Delmore mine of the Sterling Coal Company, at Leetonia, Ohio, on our Lisbon branch; the Beaver mine at Colemans, Ohio, operated by the F. M. Kirk Coal Company; (17) and the Logue mine of the W. A. Keys Coal Company at Brockwayville, Pa.

By Mr. F. BALLARD:

I think the rated capacity of the Delmore mine is 60,000 tons per year. (18) the Beaver mine probably 80,000 tons, and the Logue mine 25,000 tons. In the aggregate, the capacity of the mines of the North Western Mining Exchange Company is probably 1,308,000 tons a year, and the Blossburg Coal Company probably 190,000 tons a year. (20) I believe we furnish assigned cars for all of the coal from the Delmore, Beaver, and Logue mines. As to the statements submitted, the cars shown in the car statement are not sufficient in capacity to transport the coal shown on the coal statement. The remainder of coal is probably transported in foreign equipment. I don't know whether it was assigned or distributed in the commercial allotment. (21) The railroad stores coal. We have about 60 days' supply in storage now. Our average daily consumption is 2429 10,000 tons or a little over. We endeavor to get 60 days' supply of coal on the ground in the fall. We have not always had 60 days' supply at this time. We own no mines on other railroads.

By Director BARTEL (23):

I don't know whether we took the entire output of the mines that are off the Erie Railroad for which we assign cars.

By Mr. TAYLOR:

We purchase a certain amount of tonnage within a maximum and minimum from each one of these mines, and we furnish cars as nearly even as practicable to take that amount of coal.

By Director BARTEL:

I don't know whether these mines, when we are not taking coal from them, sell coal commercially.

By Mr. E. BALLARD (24):

The spread between our maximum and minimum is 20 per cent. We make a contract for a maximum tonnage and a minimum tonnage. We usually take 20 per cent from the maximum, which represents the minimum. There is nothing in our contract which requires us to take any coal on a particular day. (25) We are obligated to take a minimum tonnage for the season, as nearly as possible in equal monthly quantities.

By Mr. LIVERIGHT:

As to the coal shown on our exhibit from the Pittsburgh & Shawmut Coal Company, I don't know who they are. (26) They are probably not operators and very likely buy and sell coal as brokers.

By Commissioner AITCHISON:

I think the Allegheny River Mining Company is the operating company.

By Mr. LIVERIGHT (27):

The only thing I know is that the Pittsburgh & Shawmut Coal Company gives the list of the mines from which they will
2430 furnish fuel coal. They are inspected by our inspectors.

By Commissioner AITCHISON (31):

I don't know what the Pittsburgh & Shawmut Railroad Company does with the cars we deliver to it. (32) As I understand it the cars are delivered in a lump to the Shawmut Railroad for this one particular coal-selling concern, and it has charge of how those cars are allocated on an assigned basis, among the mines that load the coal.

By Mr. LIVERIGHT (33):

We have a check on the return of the assigned cars that have been sent to the Pittsburgh & Shawmut Coal Company. We have a statement every day from the transportation department showing the empty cars assigned and the loads received from connections.

By Mr. TAYLOR (34):

As to the average loading per car, we usually use 50 tons at least; sometimes it runs less than that. It is pretty hard to tell. Taking the 6-months' period where there was shipped on contract to the Pittsburgh & Shawmut Coal Company 78,572 tons, the number of cars required to load that tonnage would be approximately 1,500, and the exhibit shows that the Pittsburgh & Shawmut Coal Company received 1,312 assigned cars. (39)

A letter from J. T. Colbert, general superintendent of the Pittsburgh & Shawmut Railroad Company, addressed to Mr. William P. Bartel, director, bureau of service, Interstate Commerce Commission, was offered and received in evidence as Exhibit No. R–4.

By Mr. CURRY:

So far as I know, we have taken the entire output of the North Western and Blossburg mines. As to the information shown on Exhibit 16, concerning these companies in the year 1920, as to the sale of commercial coal, I do not know that there has been any
2431 change in their practice, except that their output may have increased.

M. S. CONNERS, (41) called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. BRONSON:

I am general manager of the Hocking Valley Railway Company, and have been for many years. I am thoroughly familiar with the Hocking Valley methods of securing its fuel coal requirements. (42) The Hocking Valley Railway Company has a peculiar situation. None of its commercial coal cars are or have been for some years suitable for commercial coal purposes. (43) Among other cars, the company owned 3,500 coal cars of side dump construction, and its locomotive coaling stations were constructed to fit this type

of car. The side dump type of car, however, after several years experience, was found to be unsuitable for general commercial use, and in 1918, when these cars fell due for general repairs, the company began to convert them into solid bottom cars suitable for general commercial loading, with the exception of 350, which it was compelled to retain for company fuel purposes by reason of the fact that the locomotive coaling stations were constructed to fit this type of car, and did not fit any other. The type of car owned by the Hocking Valley, the 350 side dump cars, were classified as work cars, and prefixed with the letter "X," indicating that they were to be confined to the Hocking Valley rails and used only in non-revenue service. These cars were never used for commercial coal loading, or any other loading excepting Hocking Valley fuel coal. They must continue to be used for company fuel purposes, so long as its present type of coaling stations exist. Its present coaling stations are well adapted
2432 to the needs of the railway, (44) and it would be an economic waste to spend the many thousands of dollars necessary to reconstruct its coaling stations to fit its commercial equipment. The effect of the assigned car decision, if construed to apply to the entire output contract mines during car shortage periods, would be to deprive the Hocking Valley of the right to use part of these cars dependent upon the percentage of car supply, and as the cars are not suitable for general commercial use, the cars not permitted to be used for company fuel purposes would have to stand idle unless some peculiar situation could be found in which the cars could be utilized. The Hocking Valley practice provides for the securing of its fuel coal at a very limited number of mines, never exceeding four, producing the character of coal best suited to our operating needs. With some of the mines, we have contracts for the entire output for continuous periods of not less than six months. With others, we have partial output contracts. At present the Hocking Valley obtains all of its fuel coal from three mines. We take the entire output of one, and the partial outputs of the other two.

By Commissioner AITCHISON:

As to how much is the partial output, I would say 25 per cent. Substantially this same situation existed during car shortage periods in the past, (45) and in the distribution of the 350 work cars at fuel mines, such cars as were placed at the entire output mines were not counted against such mines, as the Traer rule did not require the counting of company fuel cars at mines not shipping commercial coal. Where a mine contracts with a railroad for its entire output for company fuel, such mine deprives itself of all right to ship coal in competition with neighboring mines, and under the practice of the Hocking Valley, such mines are not rated, since to rate such
2433 mines would be a useless thing. The Hocking Valley Railroad Company owns approximately 9,000 commercial coal cars. It also owns the 350 work cars previously referred to. By

taking the entire output of two or three mines, all of its fuel coal needs can be fully met without interfering in any way with the pro-rata distribution of its 9,000 commercial cars. The two or three mines at which its 350 work cars are placed are deprived during the period of the output contract, never less than six months, of all opportunity to ship coal in competition with neighboring commercial mines. The efficient and economical operation of the Hocking Valley is conserved by its present practice of meeting its fuel coal needs, and so long as the mines at which these cars are used are prohibited from shipping commercial coal, in the interest of the efficient and economical operation (46) demanded by the interstate commerce act, the present reasonable and non-discriminatory practice of the Hocking Valley should not be disturbed. As to whether we buy coal on the spot market and use assigned cars, we have had no such experience. If Exhibit 102 shows the use of assigned cars when we buy on spot markets, I would say that was incorrect. (47) I personally do not know anything about the statement in that exhibit. We store coal. In February, 1923, we began to store this last time. We have in storage now about 40,000 tons, and had originally 50,000 tons. In September we had approximately 40,000 tons. I can not say how much we had on September 23, for the reason that we have been lifting that coal, on account of spontaneous combustion.

2434 (48) Storage coal as I understand it is coal stored in piles. We had 50,000 tons of such coal stored which we began to store last February. That is approximately a thousand carloads. We would have our daily requirements at the fuel stations, whatever that practice might be. It would generally run about 60 to 70 cars, and perhaps 80. As to why we reported no storage to the American Railway Association (49) I can not answer with respect to the making of a report that I did not make myself. In addition to the 60 or 70 and sometimes 80 cars of locomotive fuel in cars at the stations each day, in the ordinary course of business, we had 50,000 tons in storage, and through spontaneous fires we had to begin removing in July and since that time we have been moving some of it every two or three weeks more or less, until now we have approximately 40,000 tons of that coal on the ground, and a further fire was found in that coal on Saturday of last week. We are now arranging to take it all from storage on account of damage done by fire.

By Mr. BRONSON:

Our experience this year in storing Ohio coal shows that the conditions have got to be very different from what they were in our case. That coal was not on the ground to exceed six days until it took fire, and we now have several damage claims in the hands of insurance companies for payment on account of loss.

By Director BARTEL:

We do not assign cars for the partial output mines. (50)

By Commissioner AITCHISON:

We use these work cars at mines where we do not have the complete output, but we do not assign them.

2435 Cross-examination by Mr. BROWN:

We did not send any Hocking assigned cars to other mines than those with which we had fuel contracts. We use our "X" cars at mines with whom we have contracts (51) for fuel only, and regardless of whether we take the entire output of that mine or just a partial output of it. As to whether if we had a surplus of cars we could use these 350 "X" cars at any mine, we could not and take care of our fuel requirements. An "X" car is a special type of car designed to serve our locomotive fuel stations. There is no other type of car owned by the Hocking that serves our fuel stations. Therefore, we have to hold those cars in reserve for our own use, and we have done so since the cars were first put into service as "X" cars.

By Commissioner AITCHISON (51):

When we put one of these "X" cars at a mine where we only have a partial output, it is only used for our fuel. I would not think of putting it there in the event we had a surplus of coal and cars were needed urgently for commercial business. (53) An "X" car placed at a mine which is loading for the Hocking a part of its output would have to be counted and the mine would not get more than its pro rata. My understanding is that the Hocking Valley does not find it necessary to use the practice of counting assigned cars at the partial output mines in the same way as it does at the complete output mines.

By Mr. BROWN:

Where we take the entire output of the mine in our "X" cars we do not count that mine at all. (54) That is out of the question.

2436 By Mr. BRONSON:

We do not rate the mine.

By Mr. E. BALLARD:

We built the side-drop cars originally in 1907 for commercial use. They were in commercial service about 11 years. As to when we discovered that they were a failure for commercial use for a general-service car, we discovered that before the end of the 11 years, but the cars were in such physical condition up to that time that they could be used. We could get along with them, but in 1918, when the question of rebuilding the cars came up, it was decided, after conference with all interested parties, including the Federal Government at that time in charge, and we were directed to convert the cars into flat-bottom gondolas, with the exception of the 350 cars referred to. (55) The first cars were converted in Octo-

ber, 1918. Those cars had originally been commercial cars and they were put back into commission as ear-marked company cars. To that extent the commercial supply was depleted. Those cars were not put into commission until 1920 and 1921. (56) Car shortages were not of moment in 1920. I do not know what percentage we had. (57) We serve between 150 and 200 bituminous coal mines and we are getting locomotive fuel coal from three, the total capacity of which is about 2,500 tons a day. Our normal daily consumption is 1,250 tons. One of the mines is an output mine and two are partial. We are using our "X" cars at all three mines. We are not furnishing the partial-output mines above their distributive share, but that has been 100 per cent all the year. (58) We have never used these cars to give a partial-output mine more than its distributive share. That has been true ever since the cars have been in service. (59) As to getting coal from more mines, I
2437 would take my coal from one mine preferably. I do not think it would be possible, so far as our coal-purchasing policy is concerned, to buy from a few more mines and use all those cars in the same way that we are now using them at two of the mines. The operating cost would be excessive. We use approximately 15 to 20 cars a day. You would have to give 15 or 20 mines "X" cars. To serve those mines would cost from 15 to 20 times more than it costs to serve one mine. As to how many cars we get from these two partial-output mines, I would say about 25 or 30 cars as the total, possibly 10 or a dozen from each. (60) I have not found it necessary to assign cars in those particular cases. Any one of these mines would take care of our daily requirements. (61) As to how many we would have to buy from at the rate we now buy from these partial-output mines, in order to furnish us with our total requirements, it would be perhaps half a dozen additional mines. My objection to that is operating cost. We do not serve all the different mines every day. They do not run every day. For the last three months we have been operating between 20 and 25 per cent of our mine capacity. One-fifth of the mines on our line have been working part of the time. (62) Whenever they have coal to ship we serve them if we have the cars. My recollection is that our power was up to 100 per cent during the first half of 1922 when the mines were not in operation.

By Mr. BRONSON (63):

If we spread our contracts over nine mines and happen to have 50 per cent car supply for those mines I presume we would have to resort to the practice of confiscation to get our coal. We have never tried preference contracts on the Hocking. I have discussed that matter with a number of our prominent operators and I never could get them to listen to it.

2438 By Commissioner AITCHISON:

Our field is not overdeveloped. It has been very hard hit for the last several years. Twenty-five or thirty per cent of our out-

put is all we are loading. It has been hit by competitive conditions and high cost of mine production in the Ohio mines. I do not mean car shortage.

By Mr. BALLARD:

We have two partial output contracts with two mines and one output contract with one mine this year. We have had to confiscate coal in the past. At that time, however, we did not have these work cars or specified fuel cars in service. We have had those since 1920. As to whether we have had partial output contracts since 1920 (65), I can not say about 1920, 1921, and 1922. I am speaking of the present year as to those contracts. I do not know whether in past years we have assigned "X" cars on partial output contracts. My testimony on this subject is confined to this year.

F. E. HERRIMAN, (67) called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. PAULDING:

I am president of the Clearfield Bituminous Coal Corporation (68), owning bituminous coal mines and bituminous coal properties in the central Pennsylvania district in the counties of Clearfield, Indiana, and Cambria. The stock of that company is owned by the New York Central Railroad. The Clearfield Coal Corporation operates its own mines and produces about 1,800,000 tons, the potential capacity being 2,000,000 tons. The output goes entirely to the New York Central Railroad Company as engine fuel. We operate nine mines in five groups. One mine of Rister, with three openings; one mine of Cambria, with two openings; a mine called (69)
2439 Sample Run and two mines in Clearfield County, making a total of nine mines. As to the mines called the Cooper mines, the coal is low volatile coal used where smoke is to be avoided. Cars are assigned to the mines of our company by the New York Central Railroad for 100 per cent of the output. If we were furnished only 50 or 60 per cent, we could only produce coal to the extent of the cars furnished and could not go into the commercial business. We do not have any commercial business nor do we engage in commercial business. We would have to close down to that extent and increase the cost.

Cross-examination (70) by Mr. BALLARD:

The mines of our company were opened in Clearfield County in 1886 by the Beach Creek Coal Company, indirectly owned by the New York Central. We own about 100,000 acres of undeveloped coal lands. Those properties are held very largely for the purpose of protection, lease, and sale as opportunity offers in the creation of commercial business. The New York Central does not own or control any other bituminous coal mines besides ours as operating properties.

By Mr. LIVERIGHT:

We lease large bodies of coal lands to willing lessees. I should say we have 10 or 12. We are a lessor for the Pennsylvania Coal & Coke Corporation of about 36,000 acres. I understand they recently bought private cars. I had nothing to do with this purchase, however. (72) We lease lands to Mr. Rembrandt Peale, to the J. H. Weaver Company, and to the Empire Coal Mining Company. Approximately six or seven thousand acres are leased to Mr. Peale. The revenue derived from those leases are turned into the treasury of the Clearfield Bituminous Coal Corporation and indirectly to the New York Central as the owner of all the stock. We have our
2440 own treasurer and we retain the moneys that we get from those people. (74) I think our properties were taken out of the commercial business in 1898, and since then we have never produced coal for commercial purposes.

By Mr. CURRY: (76)

As to whether these mines are rated by the New York Central, they have been rated, but of late we have not rated them because the entire output has been taken. That is, we have not carried them on the rating list. I believe they have not carried them, although the daily output is exhausted and the mines are furnished cars to that extent.

W. C. BOWER, called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. PAULDING:

I am assistant manager, purchases and stores, of the New York Central Lines, and supervise the purchases of coal (77) for the New York Central System Lines. The New York Central Railroad normally consumed 8,000,000 tons per year and the lines approximately 16,000 tons. The New York Central Railroad obtains from the Clearfield district 163 cars per working day; from the Pittsburgh, Monongahela districts, 164 cars; from the Fairmont, 30 cars; from the Bessemer, 8 cars; from the Alliance division, Ohio No. 8 district, 46 cars; from the Hocking, 36 cars; from the Illinois fields, 46 cars; total, 493 cars per working day. That is, both the lines east and the lines west. One hundred and twenty cars per day go to the Clearfield Bituminous Coal Corporation and that is the total output of that corporation. (78)

By Mr. BALLARD:

That is included in the 163 cars in the Clearfield figure.

Mr. PAULDING:

2441 Coal from the various mines in the Clearfield district is assigned to certain divisions where it is desirable to use it from an efficiency standpoint. For instance, they have a low volatile coal which is used in certain districts; in cities where it is necessary to

keep down the smoke. The Clearfield Coal is used in both freight and passenger service. Of the 493 cars per working day, 90 per cent is obtained from mines on the New York Central System and affiliated companies. (79) The coal is purchased from 40 different operators. Seventy-four percent of the total [493 cars] of coal is bought on the total output basis at the mines. As to the 10 per cent not located on the New York Central, 30 cars per day are obtained from the Fairmont district and 8 cars a day from the Bessemer Railroad. We assign cars for 74 per cent of the tonnage. We do not place cars on the assigned-car basis to mines other than those at which (80) the system lines take the total output of the mines. It is the practice on the New York Central Lines to purchase fuel coal on year contracts, commencing on April 1 of each year. We send out inquiries to all concerned to the districts where coal would normally come from and arrange contracts. The first consideration is given to the quality of the coal. We have a corps of 15 men who inspect all the fuel and those men must pass on the suitability of the coal before the contract is arranged. After that a contract is made, based on the conditions in the territory where we buy the coal. The New York Central Railroad Company has 750,000 tons of coal stored at present, (81) or a total of 1,350,000 tons for the system.

By Commissioner AITCHISON:

This coal is on the ground. In addition we have about 120,000 tons in cars, about an average of 7 days' supply.

2442 By Mr. PAULDING:

The 750,000 tons represents about 43.5 days' supply on the present basis of consumption and the 1,350,000 tons about 41 days under the present requirements. This is a statement of the fuel situation on the New York Central Lines. It shows for the week ending October 11, 1923, that we had in cars 256,921 tons, exclusive of the Indiana Harbor Belt and the Chicago Junction, 7.4 days' supply in cars. (82) We had in chutes 29,337 tons or .8 of a day. We had stored 1,270,905 tons or 36.5 days; making a total of 1,557,163 tons or 44.8 days. That is in addition to the Indiana Harbor Belt and the Chicago Junction, in which we have an interest, which is shown separately.

By Director BARTEL:

We have more on the ground now than we have ever had at this time of the year.

By Mr. PAULDING:

We always regard coal in storage as being piled on the ground; and coal in cars as the normal production for current service.

By Commissioner AITCHISON:

I think it is possible for one of these northern lines to have 45 days' storage on hand in times such as the present when coal has been a drug on the market. From the standpoint of fire hazard or

any other hazard we could increase the amount of our storage safely. (83) It is only a question of investment and carrying charges on the coal, the expense of stacking it and putting it up there.

By Mr. PAULDING:

All coal deteriorates more or less in storage on the ground. I have had experience with the assigned cars and without assigned cars as well. As to the necessity for the line I repre-
2443 sent to use assigned cars, I think the record in the case which I have read indicates pretty fully the reasons which the railroads have testified to, which apply also in our case. The principal consideration from our standpoint is the question of quality. It is very important that we should have a uniform quality of coal for our different classes of service. Naturally we have the fastest trains in the country or as fast as they have anywhere in the country, both freight and passenger. Our engines for each division are drafted for a particular kind of coal. If we do not get that coal regularly, engine failures result. Car shortages are due to congestion. Every engine failure just adds that much more to the congestion. (84) I think it is fundamental that a regular supply of proper fuel is requisite for the proper operation of our railroad. I have been connected with the operating department of our railroad and speak from experience not only as a purchasing officer but as an operating officer. In time of serious car shortage I do not think we could properly protect the service without the use of the assigned cars to total output mines.

By Commissioner AITCHISON:

A moderate car shortage for a day or two would not make any difference, but a sustained car shortage would result in trouble.

By Mr. PAULDING:

We normally endeavor to carry six or eight days' supply of coal in the cars at consumption points and in transit on our line to protect our current consumption. There are places where we have to haul coal five or six hundred miles to get it to destinations. We do not feel that it is safe to carry less than that quantity in cars. That is based on regular shipments each day from the mines. If we did not obtain regular shipments each day from the mines, we would naturally have to increase our production. In my judgment
2444 we should increase it to 10 or 12 days' supply, which would tie up probably 2,500 additional cars during the winter season. That would further aggravate the car shortage if there were one.

By Commissioner AITCHISON (86):

As to why the New York Central has stored more coal this year than before, I do not know whether it was on the request of the commission or not, but the eastern presidents' conference had a meeting here and all the railroads agreed to store coal by September 1 and to get their roads in shape for maximum efficiency so that the

cars would be available for commercial traffic after that time so it would be possible to meet commercial demands during the fall which was expected. That has not developed, however, in the coal business.

By Mr. PAULDING:

As to over-contracting, if assigned cars were not used it would seem to me, based on experience in the past, that a railroad would have to buy probably 30 per cent more coal than it needed to protect its service in the event that we were faced with a car shortage.

By Commissioner AITCHISON:

As to whether we would have to do that on these maximum and minimum contracts like the Erie has, we buy the output of the mine, or a specified tonnage. If all the railroads bought 30 per cent more coal than they needed, (87) that creates an artificial demand for coal and it enhances the price to the railroad and also to the public. In our case we make a contract for a definite tonnage and we provide a leeway of 15 per cent. With respect to agreeing to take the minimum and have an option to take the maximum, the operators would do that within reasonable limits, but they would not do it within 40 or 50 per cent or anything like that. I have not
2445 tried to make such contracts. (88) As I said before, we have arranged our contracts with 15 per cent leeway, which is the maximum that we could get the operators to consider. I have talked to operators from the standpoint of increasing the leeway over 15 per cent, and none of them would agree to it. I wanted to make it 25 per cent. But I was not coupling with that proposition that I would do away with the assigned cars. I had not thought of that. (89) As to the suggestion that the railroad arrange with the coal operators to give the railroad the first call on the coal, no coal operator would agree to that unless we paid him a premium of 25 cents per ton. We could get our preferential contracts by the payment of 25 cents per ton more. That is what they offered two years ago. I do not think that is a fair measure of the value of the assigned-car privilege to us. This was 25 cents a ton more than the current market price of the coal. We pay the current market price for coal with our assigned-car contracts, and do not regard the assigned cars of any value to us except in giving uniform quality of coal. Our contracts to-day are on the current market price. (90) As to this additional 25 cents a ton, when the matter was considered two years ago, that was the minimum. One man said he thought he might consider 25 cents and the other operators from that on up, but it was not regarded as feasible because we could not get enough operators to agree to it to protect our service at that time.

By Mr. PAULDING:

As to whether the result of that would be either to increase the fuel bill per year or to drive the railroad company into opening more

mines upon the property of the coal company owned by it, the answer is "Yes." I have had experience in the buying of spot coal. In periods of car shortage, during the winter, the only spot coal available approximately is held by jobbers. That coal is of
2446 an inferior quality. The price is high, but aside from that the quality is not up to the standard. In addition to that it is not loaded into the right type of equipment for use at our coaling stations. As to the spread between our contract price for fuel and the spot price that we paid during the last car shortage (91) following the coal strike, I think it was four or five dollars a ton. We bought some coal and I know we traced it through six hands. My recollection is that it was seven or eight dollars a ton. We were in a desperate shape and had to have coal at any price. That was on account of shortness of production and the congestion which followed the strike. I do not know that it was attributable to the car shortage as much as it was to the strike of the miners.
2447 (91) As to the confiscation of coal by the railroads if the assigned-car privilege were taken away, I think during the winter seasons when there is bad weather and the car shortages usually exist, it would be inevitable that we would have to confiscate coal to protect our service.

By Commissioner AITCHISON:

We sometimes have to do that even with the use of assigned cars, due to other conditions mainly, which prevented the movement of the coal to the consuming point, but it would be largely increased if we did not have the assigned cars.

By Mr. PAULING (92):

We have certain coaling stations that take hopper cars and others that take flat bottom cars, and our orders with the operator provide for the right kind of coal equipment to be shipped to the various stations; shipped regularly to that point. By taking spot coal we have to take whatever kind of equipment is available. (93) The storage of coal would not cure the trouble concerning assigned cars with the present facilities because if the railroads did store a largely increased supply at the consuming points with the present facilities they could not raise the coal fast enough to meet the requirements.

By Commmissioner AITCHISON:

The present facilities consist of storing it on the ground with a locomotive crane. In loading coal if you have a long string of it 12 feet high, you can only attack it at both ends by these locomotive cranes. The railroads could, by spending millions of dollars, provide for fast handling at consuming points, but it would take an enormous investment.

2448 By Mr. PAULING:

Weather conditions in our territory have a lot to do with that. (94) The coal freezes, gets saturated with snow, and we have

considerable trouble in getting it loaded. We cannot do it with our present facilities unless we had supplemented that supply by coal coming regularly in cars. As to wider distribution of coal orders among the mine operators, I do not see that that would help us in any way in the case of a car shortage, because, for illustration, if we have 50 per cent car supply, the railroads under contract will get only 50 per cent of their contract tonnage, necessitating the buying of 50 per cent of their supply, or confiscation. That would have effect upon the expense in placing cars to individual mines and I think would increase it. As to preferred delivery contracts, if I recall correctly, it was two or three years ago when Mr. Gutheim and the rest of us had some sessions on that subject, and after I got back from New York I tried it out and I could not make any satisfactory arrangement with the operators to meet our needs.

By Commissioner AITCHISON (95):

The position they took was that they could not afford to sell us that coal, guaranteeing preferred delivery, because if a car shortage occurred they would probably get a greater price in time of shortage and therefore they wanted us to pay a premium for that possibility.

By Mr. PAULING:

As to priority orders of the commission, if the commission indicated that they would positively make priority orders in the event of a car shortage it would help, but in the absence of any advance indication that we will get such priorities, I do not think it
2449 will be effective. The element of time is a factor. The commission, I presume, would have to hold a hearing and we would be in trouble before a ruling could be made. In the second place, I, for one, would not feel safe in not over-contracting for requirements to protect our service, unless we knew positively and absolutely that we could get priority orders.

By Commissioner AITCHISON (97):

As to whether in times when there is an acute distress we try to minimize the call which we make on assigned cars and throw more assigned cars into the general business, we endeavor to buy the minimum of coal that we need to protect ourselves on the assigned car basis. We try to make as little use as possible of the assigned car. We must first protect our fuel supply, keep down the number of cars of coal at our consuming points to the minimum, in order to make available that many more cars for commercial traffic. If an acute car shortage should come on we would not expect to go on assigning cars not only for current operation but also to build up additional storage. Our assigned car contracts cover our minimum summer tonnage. Our consumption will jump from 450 cars in the summer to 600 cars in the winter. (98) This storage has been purchased to protect that additional consumption in the winter. The additional coal is purchased without the use of assigned cars. There has been a large surplus of cars all summer. The assigned-car question right

now is more or less academic. In the event of famine in coal due to car shortage it is our policy to put ourselves as closely as we can on a famine basis. We want to cooperate with our operators to get the maximum shipments of revenue freight. At such times there has been consolidation trains and the abolition of pleasure excursions. For a while during the last car shortage we abolished all the excursions. That was due to the coal supply and the congestion of traffic combined. (99) Following the coal strike there was
2450 the switchmens' strike. That is the time when we limited our business to the minimum.

By Mr. BALLARD:

All of our assigned car (100) contracts are made on the basis of summer consumption which is our minimum tonnage. The conditions just referred to usually happen in the winter time. We do not assign cars on our partial output contracts but do on our total output contracts. (101) We are not now storing spot coal. We did this summer. It was, roughly speaking, about ten cents per ton cheaper than our contract coal at that time. (104) With respect to Mr. B. F. Neale's testimony as to supplying railway fuel on the E. I. & T. H. division of the Big 4 without assigned cars, (105) I don't know the conditions down there. If we could get the operators to give us preferred delivery of the cars it would be practicable. In our experience the operator represented to us that he had contracted the estimated output of his mine and he cut us pro rata with the rest of the shippers. (107) The 40 operators from which the total tonnage of the New York Central Railroad comes represents about 150 mines. Some of those are on the New York Central, some on the Pittsburgh & Lake Erie, and some on the Big 4. About 20 are on the New York Central Railroad. I do not know how many mines the New York Central serves. I should say several hundred. (108) Some of the output contracts are with mines owned and operated by companies operating more than one mine. We buy the output of a specified mine. The assigned cars are put at that mine. (109) We would not permit the cars to be placed at other mines of the same company selling commercial coal. There have been many cases where we took the output of a mine for a year and did not renew the contract the next year. (110) The Big 4 Railroad owns about 75,000 acres of undeveloped coal in southern Illinois, but no coal mines.

2451 By Mr. BROWN:

In referring to the Hocking district I meant mines on the Ohio Central line, which is owned by the New York Central Railroad. The entire district is No. 6 vein of coal, but we only deal with our own field on our own lines. (111) We do not own and are not interested in any mines down there to my knowledge from a purchasing standpoint. The T. & O. C. does not own any mines in the Hocking district. I think that the New York Central owns some bonds of the Kanawha & Hocking Coal Company, but they

do not own any stock and have no interest in any of them. (112) When I stated that our contracts called for the market price of the coal I meant the market price at the time the contract was made. That is not a sliding scale. The only change would be dependent on the wage scale. 74 per cent of our tonnage is predicated on the fact that we will furnish cars if we can. We have had 100 per cent car supply this year. (113) In the event of a car shortage the mine did not operate on the day when we could not furnish cars. They are not permitted on our line to ship any commercial coal where they are on an assigned-car basis.

By Mr. LIVERIGHT (114):

There are different veins of coal in central Pennsylvania. Each district has a certain quality of its own. It is correct that the coal lands, of which we are lessors, in the Indiana district are practically the same quality as those from which we produce. As to whether the independent operators there could furnish us with just as good quality of coal for our general fuel purposes as we produce ourselves, we buy considerable coal from the general coal operators down there. We must have 20 or 30 contracts. We buy from the Empire Coal Mining Company, Rembrandt-Peale, the Pennsylvania Coal & Coke Company, and probably 15 contracts for one or two cars a day with little operators. (115) We buy ten cars
2452 a day from the Pennsylvania Coal & Coke Company. Our policy in buying coal in the Clearfield district is to determine the quantity of coal we want to buy in that field, aside from the tonnage furnished by our own mines. Then we send out inquiries and establish a price and endeavor to give every operator on our railroad a portion of that tonnage, based on his commercial traffic during the preceding year. That is done in an endeavor to be fair to every operator, to get them to build up their commercial traffic. We find it practicable to deal with a great number of operators in the Clearfield field, but their production is very small. We have had satisfactory results from most of them this year, but in times of car shortage we do not get our coal from those little fellows. As a general rule we get fair results. They are very good operators down there. (116) I suppose we have, roughly, a hundred mines on the Pennsylvania division of the New York Central; maybe more than that. We endeavor in buying our fuel coal to take some from nearly all of these operators if they will meet the conditions in April and the quality of coal is satisfactory to our mine inspectors. (118) On April 1 of each year we arrange a contract with the Clearfield Bituminous Coal Corporation. At the same time we arrange our commercial contracts. During the Government test period prior to Government control we paid the Clearfield Bituminous Coal Corporation 7 cents per ton less than we paid our commercial operators in the Clearfield district. We have continued that arrangement, the present contract being 7 cents a ton less than we pay the commercial operator. That is regardless of the amount it costs us to produce

that coal. (119) That price enables the Clearfield Corporation to realize a fair return. That co'poration is an entirely separate entity, and I have nothing to do with the return. I don't believe they have ever paid a dividend. The earnings are used to improve their mines, build new tipples, and as old mines work out work new
2453 openings. I do not think they have bought any coal lands in a number of years. (120) This 7 cents per ton arrangement was under the approval of the Director General of Railroads during Government control. As to whether, if we did not have assigned cars at these mines, we could produce coal for 7 cents less per ton that we pay the commercial operators, it depends entirely upon business conditions. We certainly could not produce coal cheaper if we had the same car supply as the other operators. Naturally the coal ought to cost us the same as their cost. As to whether by virtue of having these assigned cars our costs are very materially reduced, I think not. At the present time the cost should be relatively no less than the commercial operators in that field, excepting that they have a full outlet for their tonnage. The Cambria & Indiana Railroad is a feeder of the New York Central. I do not know whether some of the mines of the lessees of the Clearfield Bituminous Coal Corporation are on that line. (123)

By Mr. CURRY:

We purchase some of our coal from mines on the Pittsburgh & Lake Erie, a subsidiary of the New York Central. I think there was a substantial car shortage on the P. & L. E. in 1920. I think assigned cars were used on that line for New York Central coal. (124) I was handling the New York Central coal at that time and we were using assigned cars in 1920.

2454 (124) The New York Central, as I recall it, sent cars to the P. & L. E. for their New York Central fuel coal. (125) I don't think we had any output contracts on the P. & L. E. proper as distinguished from subsidiary or affiliated lines of that railroad, in 1920, and don't think we got any tonnage in that year on the P. & L. E. proper for the New York Central Railroad. I had in mind lines like the Monongahela, of which the P. & L. E. own half, and the Montour and those affiliated lines.

By Director BARTEL:

With respect to the answer to the questionnaire concerning the assigned car practice of the New York Central in 1920, (126) I think there is a mixup there. To the best of my recollection we assigned cars for the C. B. C. Corporation in 1920. We bought considerable coal then, as now, from small operators, to whom we did not assign cars. That may account for the confusion.

Redirect examination by Mr. PAULDING:

We have one output contract in the central Pennsylvania district besides with the Clearfield Bituminous Coal Company, and that is with Rembrant Peele, but we have other contracts with other opera-

tors besides those two companies. In buying coal in the Clearfield district we endeavor to divide it among the Clearfield operators in proportion to their commercial shipments. (127) For instance, we buy coal from the Empire Coal Company under a contract for three cars a day for the current year. My recollection is that they were entitled to but 5½ cars daily on their commercial rating or commercial tonnage, and they refused to take more than three cars at the price prevailing last March. That applied to other operators as well. We have been taking total output contracts since authorized by the commission.

By Commissioner AITCHISON:

2455 (128) We did this when the Hocking Valley case was decided, depending upon business conditions as to whether we needed assigned cars or not to protect our fuel supply.

By Mr. PAULDING:

As to taking the total output of a mine for a year and then not taking it in the following year, the reason would be reduced consumption of coal, which would (129) necessitate our buying less coal than we had for the previous year. That would be entirely on account of business conditions.

By Mr. E. BALLARD:

That is not the only reason that led to a shift from one mine to other mines in output contracts. Sometimes the mines having the output contracts in the succeeding year would not want to sell us the coal at the prevailing price, and then of course we could not make a contract. There might be other reasons; for instance, a mine running into a bad seam of coal, where the quality would not be satisfactory. We get 95 per cent of our coal, I should say, from the same operations year after year. I would be true since Government control, because our consumption has largely increased. We have added new mines.

J. E. DAVENPORT (130) called as a witness and, having been duly sworn, testified as follows:

Direct examination by Mr. PAULDING:

I am superintendent of fuel economy and locomotive performance on the New York Central Railroad. Generally speaking, my duties are efficiency engineering (131) work in connection with the use of fuel and performance of locomotives generally, as well as numerous assigned duties. In that connection I am familiar with fuel supply. On the line east of Buffalo we use what we term

2456 Pittsburgh coal for our main-line passenger service. Most of that coal comes up off the P. & L. E. to us at Buffalo. That is the Pittsburgh district. That coal is transported all the way to New York City proper for the use of the main-line passenger service.

On the river division, which extends from Ravena to Weehawken, the old West Shore, we use Fairmont coal from the Fairmont field in West Virginia. The locomotives of the passenger service are particularly adapted to the use of Pittsburgh coal. I can explain it best by an example of what occurred in our passenger service this last summer. Due to the attempt to store as large a volume of coal as possible, and necessarily storing the coal which could be stored economically, (132) which was the Pittsburgh coal, it was necessary at times during the summer to remove Pittsburgh coal from the main-line passenger service at Solvay, which is the Syracuse engine terminal, and substitute it for Rossiter coal, which is one of the C. B. C. Clearfield coals. The analysis of those two coals shows that the Rossiter coal analyzes at 14,400 B. t. u.'s, while the analysis of an average Pittsburgh coal which we have used for years shows 14,565 B. t. u.'s, indicating that so far as the heat content is concerned those coals are practically identical. Beginning the week ending June 23, it was necessary to remove some Pittsburgh coal from the Solvay supply. In the week ending June 9 there was no Rossiter coal placed into this particular terminal, and 83 cars of Pittsburgh were consumed. June 16 no cars of Rossiter and 92 cars of Pittsburgh were consumed. The following week 66 Rossiter and 25 Pittsburgh. The week ending June 30, 72 Rossiter and 19 Pittsburgh. This mixture of Rossiter and Pittsburgh coal continued there until the end of September. During the four months, June, July, August, and September, there were 13 engine failures on account of the (133) quality of coal charged against this terminal, and of those
2457 13 failures, 11 of them were directly chargeable to the Rossiter coal. The other two failures could not be pinned down to any particular kind of coal. The men operating the engines on that territory are all old qualified men, most of the firemen being qualified enginemen. The engines are the latest design that we have purchased, and the engine house the last that has been built on our railroad, so that as far as we know how to build a modern engine house, Solvay represents it. As to whether the Pittsburgh coal is furnished on assigned cars, I am not in a position to touch the assigned car side. I get in contact with this coal after it gets on the railroad and the distribution starts. Other than the main line passenger service, we use Pittsburgh coal in the northern part of New York State to a certain extent. It is what we call the overflow. If there is an overflow from the main line passenger service, we put in Pittsburgh.

(134) The main line freight service is covered by C. B. C. Company's coal. We try to keep the Rossiter and Commodore coals particularly in that service. They are the coals from what we feel are the best mines. The other mines are not as satisfactory for that service. We use the Bar Slope sample run coals on the Harlem division, and to substitute in northern New York State when there is not a surplus of Pittsburgh coal. The Pennsylvania division proper uses a small amount of Rossiter for Mallet engines, and we

try to keep the other Clearfield district coals, which we get in small quantities from these various mines, on the Pennylvania division and keep it off the main line. In the New York territory, for switching purposes, we use one of the C. B. C. coals known as Cooper, a low volatile coal. That is entirely satisfactory. This Cooper coal is also used in the switching territory at Buffalo and in the vicinity of Albany, where we have smoke trouble. The Cooper
2458 coal is a smokeless coal. (135) It is used in New York City. The Public Service Commission of New York State, first district, will not allow us to use any bituminous coal south of 96th Street, so that down there we have to use anthracite coal. It has granted permission to us to use Cooper smokeless coal in the other New York territory, including North White Plains, Motthaven yard, and the switching territory north of 96th Street.

Albany is a community where the locomotives operate in the vicinity of residences. We have had a great deal of smoke trouble there, and we find that by the use of Cooper smokeless coal we get away from a great deal of that trouble, so that on the grade engines at Albany, which are used for pushing passenger trains out of Albany three miles west, and on the power plant at the Rensselaer engine house, which is in the center of this community, we use Cooper coal; also for the engines which switch in Weehawken yard. (136) Our consumption of Cooper coal seems to be about 80 cars per week. If we could not get this Cooper coal (137) I would not know, from my present information, where to go to purchase coal of an equal or similar character. We have to watch the Cooper coal very closely to get it to the points where we want it. Whenever we fall down on the distribution and do not supply Cooper coal, we are in trouble with the authorities, which is quite often. Our inspection forces cover the Cooper mines as well as the other mines, all mines for railroad coal being inspected. Our experience has been that we get the best results by storing Pittsburgh coal. So that to-day our storage pile represents (138) probably 80 per cent of it. The reason for this is that when we pick that coal up it gives us better results than when we pick up the Clearfield coals. The latter seem to deteriorate more than the Pittsburgh coal. As to liability of fires, we have very little trouble when we have clear, clean Pittsburgh coal, with fires.

2459 (139) Cross-examination by Mr. E. BALLARD:

As to the engine failures caused by the mixture of Rossiter and Pittsburgh coal, I think it is a human element. It is because the firemen in that territory are, you might say, born and brought up on Pittsburgh coal. It is a low-volatile coal, and the other is a high-volatile coal. (140) You can run the two different kinds of coal in the same locomotive, but if you are going to operate all the time with the low-volatile coal, you should draft your engines differently from the efficiency standpoint. We have some places on our railroad where we use Rossiter coal at all times, and it does not create engine failures there. It is surprising the number of failures we have in

were used in company business as extra cars. There were no commercial coal cars. We did not assign any cars for our coal. There is one mine at Peoria, Illinois, which is reached by the Lake Erie & Western. (153) I think while I was with that railroad we got something like 10 or 12 cars as an experiment from that mine, but the supply came from foreign lines on the pro rata car distribution. We contracted for our total annual consumption. We did not over-contract. We had a maximum and minimum provision, a maximum and minimum for the year, the spread being, I think, about 10 per cent. I am not positive on that.

2463 By Mr. BROWN (154):

There are somewhere in the neighborhood of 250 or 260 mines on the T. & O. C. Our engines were drafted to burn a particular district or grade of coal. The mines on the T. & O. C. are practically in one district, but it is not all the same grade of coal. It is not a fact that every mine on our line is in vein No. 6, except one. There are some mines over in the Cooksville district that are not in the No. 6 vein. There is some six in there, but I think there are some 7 or 8 veins over in there.

E. A. AIKENS, (156) called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. PAULDING:

I am purchasing agent, Michigan Central Railroad, and have to do with the purchase of fuel coal for that line. We have mines on the Michigan Central from which we secure 24 cars a day out of our total supply of 140. (157) I am familiar with the purchase of the fuel supply for the Michigan Central, both under the assigned car rule and not under that rule. Under the assigned car rule we have been able to get coal from approved mines, a regular source of supply, and keep the number of cars under load with coal much lower than when we were getting our coal without assigned cars. It is fair to say that the source of supply without assigned cars is irregular when there is a shortage of cars. As to the two methods of obtaining fuel supply, I should prefer the assigned cars. We make total output contracts (158), and have at the present time only two such contracts. There are other contracts which we have in connection with the New York Central or the T. & O. C., New York Central lines, which take up the coal
2464 output of some other mines, a portion of that total output being furnished to us. We make contracts for what we term the coal year, April to April.

By Commissioner AITCHISON:

We followed the practice of assigning cars for railroad fuel on July 22, 1922. I think the reply to the questionnaire shown in Exhibit 102 must be a mistake. As to our practice in respect to spot purchases in 1922, we would not use assigned cars for spot

purchases with this qualification that we made some six months' contracts, (159) where we furnished assigned cars. I think that was in 1922 when we stored some coal. Where we have contracts with the other New York Central lines they are on the assigned-car basis. Where we have contracts that are less than for the output of the mines, we do not assign cars. I should say that the answer to the questionnaire in Exhibit 102 showing that cars were assigned in October, 1922, on less than output contracts, is incorrect. (160) I don't remember what the practice was in 1920. I should say that in that year if we took the entire output of a mine we furnished the cars.

Cross-examination (161) by Mr. E. BALLARD:

As to whether we assigned cars to the mines we serve directly in Michigan, if they are on our road, that is part of the operation, so there are 24 cars per day, out of 140 we receive, from our own mines on the commercial distribution of cars, the only assigned cars we use being those sent to mines on other lines where we have output contracts. I think we have some small contracts for a few cars a day that are not output contracts on other lines. This is not clear to me because (162) there are some figures here for a small number of cars per day, but it may be a joint contract with the other New
2465 York Central lines. We would assign no cars for partial output contracts.

By Mr. LIVERIGHT:

I should say during the car shortage period following the coal strike in 1922, we might have been getting 12 to 20 cars per day that were not total output mines.

By Mr. E. BALLARD:

I mean from off our line.

By Commissioner ATTCHISON (163):

We have some mines on our line up around Bay City.

By Mr. LIVERIGHT:

Up to April, 1923, we received these 12 to 20 cars. Our coal year commences as of April. (164) As to the proportion of fuel we got from mines on our own line in 1918, my recollection is that in that year we got from the Michigan mine a larger number of cars than we did this year. We possibly got 30 during that period where we are getting about 24 now.

By Mr. E. BALLARD:

I can only give probably an average of the cars we would have to haul under load without assigned cars. I think without such cars, located as we are, it would be unsafe to carry less than, say, a 10 days' supply in cars. We are carrying over six now. The period when we did not use assigned cars was possibly 1916 or 1915, back several years. (165) I went with the Michigan Central in 1912, and we operated quite some time without having assigned cars to protect us.

From 1912 until 1916, or thereabouts, we did not use them at all, to the best of my recollection.

By Commissioner AITCHISON:

It is my understanding that you use the term "assigned cars," that when we make a contract with an operator, we agree to supply the cars to load that coal. Our contracts, as I explained, were for
2466 the output of a mine, where we furnish what I term "assigned cars." (166) Some of those contracts are joined with other New York Central lines. It is my understanding that if the contract took 20 cars from that mine, we must send down there to that mine 20 empty cars each day.

By Mr. E. BALLARD:

As to whether they get that no matter how many cars are available for distribution in that district, those mines are located off our line, and when we turn them over to our connections it becomes an operating matter. I do not know anything about it further than that. Our theory of sending the cars is that we will get 20 cars every day. Between 1912 and 1917, my recollection is that coal was bought without an agreement to furnish the cars. I believe that as far back as that we were buying a certain number of cars a day without regard to the output. We would never take the entire output of the mines on our line. (167) Probably at that time we had no output contracts at all, and I don't think we had assigned cars.

By Mr. BROWN:

In making our contracts on the Michigan Central for coal, I submit all our contracts to the head office of the New York Central in New York City. (168) I make no coal contract without their approval. When we get ready to negotiate our coal contracts, we have a list of mines that embraces perhaps 250 or 300 operators, and we give them all an opportunity to bid. It does not anywhere near take all of them.

Q. (By Commissioner AITCHISON.) I think your attention should be called to the fact that in the questionnaire, Exhibit 102 (169), a statement showing the assigned car practices prevailing during October, 1922, this question was asked: "Is your company at the present time (meaning during the month of October) following the practice of assigning cars for the protection of your rail-
2467 road fuel loading at the mines located on your line?" The answer by the Michigan Central Railroad is "yes." Do I understand that that is incorrect; that you are not assigning cars?

A. I really do not just exactly know how to answer that, Mr. Commissioner. The mine has an output, we will say, of 40 or 50 cars, of which we take 24.

By Director BARTEL:

These mines are on our line, and all the cars they use are furnished by our transportation department.

By Commissioner AITCHISON:

I do not think that mine ever operates up to its mine rating. As to whether it operates up to its own commercial distributive share as measured by what the other mines are getting at the same time, those mines are all operated by one company on the Michigan Central. I think their capacity, if they could sell the coal, is greater than what they have produced. (170) I could not say whether we have mine ratings on the Michigan Central on these mines.

By Mr. E. BALLARD:

I could not say whether they ever have a car shortage at these mines. (174)

Q. (By Commissioner AITCHISON.) Now, when I say "assigned car" I do not mean merely a car that you send to a particular mine, tag it to go to that mine, but I also mean that that car should be counted with respect to the ratable distribution of cars among mines according to the rule which is said to have been laid down and fixed by the commission in the Hocking Valley and Traer cases. Do you understand that definition of an assigned car, as I have given it to you?

A. I understand what you say; yes, sir. I did not know that.

Q. Under that definition, what is the fact? Do you, or do you not, assign cars to the mines located on your own lines

2468 up around Bay City?

A. I do not know.

2469 WILLIAM L. BARNES, (179) called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. MCFARLAND:

I testified in this proceeding in November, 1922, and dealt at that time with the situation of the Valier mine owned by the Burlington through a subsidiary company, the Valier Coal Company. Since the time of my testimony, the daily capacity of this mine has increased from 4,200 to 4,500 tons, to 5,500 to 6,000 tons. It is expected that ultimately this daily capacity will reach 7,000 tons. The present daily capacity of the Valier mine is about 6,000 tons, and based on that capacity the present daily car requirements are about 118. The Valier Coal Company owns about 15,050 acres of coal land. That includes acreage owned entirely and coal rights. (181) They figure the amount of coal in the ground available for extraction to be 78,000,000 tons. This mine produced in 1919, 251,347 tons; in 1920, 791,451 tons; in 1921, 565,116 tons; in 1922, 584,587 tons; in 1923, from January 1 to October 1, 972,671 tons. I have figures indicating the relative cost to the Burlington for January to July, inclusive, 1923, of the coal secured at the Valier mine, as compared with coal secured from commercial mines. (182) As to the purchases from other than the Valier Coal Company, the lowest price was in May, $2.966; the highest, in January, $3.19. As to the Valier Coal Company, the lowest was in March, $2.463; and the highest, in Janu-

ary, $2.731. So that at all times covered by these figures the coal from the Burlington's Valier mine cost the Burlington less than coal it secured from commercial mines. The Burlington has 121 self-firing locomotives of the so-called Streets type. All of those are on lines east of the Missouri River. The approximate value of those locomotives, without considering the depreciation
2470 at the present purchase price would be $7,246,000. (183) They consume the southern Illinois coal that will pass through a two-inch screen. This grade of coal produced at mines in other territory on our line has not proved satisfactory. The use of fine coal has been found most satisfactory from the standpoint of economy and efficiency—that is, in the price of coal and helping commercial mines to dispose of a grade of coal for which there is frequently no market. Its production is a by-product. Engines using this coal are equipped for self-firing and are of a very heavy type that can not be operated efficiently with hand-firing. The Burlington owns 27,863 cars. The Valier mine is located on the Beardstown division. On that division there are 49 commercial mines to which the Burlington has access. In the past it has been found impossible at times to give commercial mines full-car supply for loading bituminous coal. (184) The last period of coal car shortage on the Burlington was approximately from September 1, 1922, to April 1, 1923. The percentage of coal cars supplied to coal cars requested during that period was about 80 per cent, based on actual ability to load in cars. The Burlington stores bituminous coal on its line. It has not been deemed practicable to store fine coal. On account of its firing and deterioration we do not store any mine run or screenings; we store egg and lump only and separate it in piles as between screened lump and egg. I have prepared a statement showing the amount of coal stored on the Burlington line on October 1, 1923, and the location of the storage piles. There are 20 points where we have coal. On October 1, 1923, we had in storage 648,685 tons.

(The statement referred to was offered and received in evidence as Exhibit No. R–5.) (185)

The Valier Coal Company is not engaged in the commercial coal business. In approving the transfer of coal land owned by
2471 the Burlington to the Valier Coal Company and the taking over by the Burlington of all the capital stock in the Valier Coal Company as in the public interest, and on account of the saving in operating expense, the Illinois Public Utilities Commission imposed the condition that the Valier Coal Company should not sell or supply coal to the general commercial trade. This company is not engaged in business for a profit. Another condition imposed by the public utilities commission was that the price of coal paid by the Burlington for the coal received from the Valier Coal Company should not exceed the latter's actual cost of production, plus an amount sufficient to pay interest on the investment and to provide a sinking fund. (186) The Valier Coal Company is simply a

subsidiary of the Burlington, incorporated for convenience, to take over and handle the Burlington's coal lands for the Burlington's benefit. The principal office of the Valier Coal Company is at Chicago, right in the same building with the Burlington offices. As to whether any of the officers of the Valier Coal Company are officers of the Burlington, my answer is "yes." They do not receive any salary from the Valier Coal Company. (187) I have ascertained from the records of the Burlington that the coal lands of the Burlington were transferred to the Valier Coal Company and that the Burlington owns and holds the stock of the Valier Coal Company. I have certified copies of the orders of the Public Utilities Commission of Illinois in its Docket 6949, dated July 25, 1917, May 13, 1918, and September 3, 1919, all relating to the conveyance by the Burlington of certain coal lands to the Valier Coal Company.

(The document referred to was offered and received in evidence as Exhibit No. R–6.) (188)

Cross-examination by Mr. E. BALLARD:

I think there is no reference in the order of the State commission to the assignment of cars or that such assignment was
2472 in the public interest. They perhaps took that for granteo. (189) As to the increased production of the Valier mine in 1923 as compared with 1921, I think it shows not only development of the mine but more working days. In 1922, the period of the strike, I can not say, but there has been considerable development which is reflected in the output in 1923. We have closed down the mine on several occasions in August and some time in September, and we are now working four days a week at Valier mine. As to whether that represents a continuation of the policy of closing down this mine when business is slack and depending on our commercial contracts, we close it down when our contract coal mines meet our requirements, without any question, and there is another factor that enters into the closing down of the mine, and that is, and has been the case for several months, a particular type of coal is marketable while others are not. It is to the interest of the Burlington Railroad to secure as much freight as it can, for the revenue, and we therefore, in a number of cases, accepted coal from contract mines and non-contract mines to improve conditions and realize more freight revenue; that is, to allow them to market marketable coal, because the season's demand has been for fine coal, leaving it with the (190) screened coal undisposed of, and the screened coal is what we use in large quantities for storage and engine use. Our practice has been that in times of slack business we close the Valier mine and depend on our contracts. (191) We make no profit on the Valier Coal Company. The more we operate the Valier coal mine and the more steadily it works, the cheaper the supply. I do not know what effect it may have on the outside coal, whether they

make a profit on it or not. (192) I assume that continuous operations would necessarily produce coal at a less cost.

By Mr. ROPIQUET:

As to the period which I have referred to in respect to cost, I haven't the idle time of our mine, but in my opinion it was operated fairly regularly. I think that during the same
2473 time the commercial mines did not operate very steadily on account of market conditions. In figuring our cost of coal (193) the mine pays interest on the investment, on a representative land value. They have another charge like upkeep.

By Mr. MCFARLAND:

They have a sinking fund. As I understand it, for every ton of coal that is taken out of the ground there is a certain amount of replacement in money to represent that loss to the property. (194)

By Mr. ROPIQUET:

Neither the directors nor the president of the Valier Coal Company, who are Burlington officers, draw any salary from the coal company.

By Mr. BROWN:

As to whether we have changed our policy with respect to spreading over our entire line as nearly as possible contracts with our shippers, we continue the same practice of dividing up our purchases.

By Commissioner AITCHISON:

The last figures I was able to secure from the supply department was that the daily consumption of coal by the Burlington ran as low as 9,000 and as high (195) as 17,000. The approximate daily consumption will average about 13,000 to 13,500 tons. We have increased our production since the testimony in November to from 4,500 to 5,000 at the present time. The increase in our supply from the Valier mine would materially decrease the supply purchased from the independent mines, if business was the same. We have had a few full output contracts with the independent mines. I understand at the present time (196) we do not have any. I do not think we have had any in 1923. They are only part outputs. We have assigned cars only at our company mine, which is perhaps about 6,000 tons a day, and if we are using 13,000 tons, the
2474 difference is made up from other mines—it is not all from contract mines—we take coal from mines with whom we have no contracts. The balance would be from independent mines.

By Mr. CURRY:

There was a car shortage during the first part of this year up until April on the Burlington. (197) In southern Illinois for January, February, and March our average contract cost of coal from other than the Valier mine was $3.25; the subsequent four months—April,

May, June and July, $2.85. During the car shortage in the first part of this year we assigned cars only to our company mine and to the mine where another railroad furnished cars and took the full output for six months. As far as our own fuel supply was concerned, we furnished assigned cars only to our own mine. As to whether we could get coal from commercial mines cheaper than we could get coal from our own mine (198), I do not think that that situation has occurred where we have changed our policy. I do not think it has been our policy to close down our mine because we could get coal cheaper from commercial mines than we could get it from our mine.

J. R. PICKERING called as a witness, and having ben duly sworn, testified as follows:

Direct examination by Mr. FLETCHER:

I am superintendent of transportation of the Rock Island Railroad, at Chicago, Ill. (199) The Chicago, Rock Island & Pacific Railway uses about 3,500,000 tons a year of fuel which it secures from mines on its own line and on connecting lines. 60 per cent of the fuel comes from mines off the line and 40 per cent from mines on the line. The mines off our line are in Illinois, on the Chicago & Alton, the C. I. & M., and the Louisville & Nashville; in Colorado, on the Colorado & Southern and the Denver & Rio Grande; in New Mexico, on the El Paso & Southwestern. We
2475 regularly send cars from our line under special assignment to all mines located (200) on other lines, with the exception of the Colorado mines and the New Mexico mines. To the latter two locations we are furnishing about 50 per cent of the equipment. At the New Mexico mines, the originating line furnishes cars during a surplus, and calls on us for cars during shortage. The coal which originates on our own road is located in Iowa, Oklahoma, and a very small portion in Texas and Missouri. The amount of consumption of fuel coal by the Rock Island, which I gave, included the Texas lines and all the system. The Rock Island Railroad owns two or three mines in Oklahoma. I would say not over four or five per cent of our company fuel originating on our line comes from these mines. (201) It is a very small percentage. The Rock Island assigns cars to mines located on its own line in times of car shortage. We produce between 50 and 60 cars of commercial coal a day, while we load about 125 cars of company coal a day on our line.

By Commissioner AITCHISON:

We produce and sell coal from our own mines. I think it is all consumed in Oklahoma.

By Mr. FLETCHER: (202)

As to the disadvantage to our line, if the assigned car rule were abolished, it would be more particularly with respect to the furnishing of cars for loading on connecting lines in the Illinois fields, where we must furnish our cars for company fuel, otherwise we do

not get it. On our own line we give preference to supplying min
who produce our company fuel. In times of car shortage, wh
there are not sufficient cars to meet the requirements, failure to fu
nish cars in sufficient quantities to the mines producing our coal, ea
day, would result in a shortage of company fuel and the conseque
result of not having fuel to operate our trains. Coal produced
what is known as the Springfield district in Illinois is co
2476 sumed on our Illinois line, on our line through western Iow
and in Minnesota. Coal produced in what is known as t
Peoria district is consumed partially on our Illinois Division or
Illinois and eastern Iowa. (203) Coal produced in what is know
as the Des Moines and Sheridan district in Iowa on our own line
consumed in Iowa, South Dakota, eastern Nebraska, Missouri, a
eastern Kansas. Illinois coal purchased in the Belleville district
consumed in Missouri and eastern Kansas. That comes to us at S
Louis. Coal received from the coal fields is consumed in Colorad
western Nebraska, and northern Kansas. Coal received from the N
Mexico field is consumed in New Mexico, southwestern Kans
western Oklahoma, and the panhandle of Texas. The coal receiv
from the small mine in Missouri, known as the St. Louis mine,
consumed locally on the Missouri line. The same is true of the co
received from the Texas mine, which produces only one or two ca
a day, and is used locally right where it is produced. The Oklaho
coal is used in Oklahoma, southern Kansas, northern Texas, a
eastern Arkansas. The coal is used as near as possible to the point
production. If our supply of Illinois coal should be reduced by on
half on account of the car supply (204), it would result, if we we
not able to buy coal on the spot market, in our having to confisca
coal or buy coal on the spot market, if we could not make arrang
ments with some other Illinois mines to furnish us coal. We feel
would be a serious handicap to us not to be able to secure our co
pany fuel regularly, from regular sources, where our locomotives a
drafted to burn that coal peculiar to that territory. From expe
ence we have found it very much to our disadvantage to burn co
picked up here, there, and wherever we could get it, by reason of t
fact that the locomotives were not drafted to burn that kind of co
It results in engine failures, delay to trains, and consequent increas
operating expenses. Likewise, the confiscation of commercial co
made necessary by our failure to get our coal results in increas
cost of the coal, to the disadvantage of the shipper as well as to t
railroad.

2477 Cross-examination (205) by Mr. BALLARD:

We assign cars on partial output contracts to mines on o
own line. They are in our business and commercial business bo
days. As to whether they may receive from us more than their d
tributive share on a given day and still get their full pro rata
commercial cars the next day, my answer is yes. I cannot s
whether that is true of our off-line mines. I haven't the exact f

ures, but I should say there are probably 15 or 20 mines on our own line we buy from. We serve 72 mines. We serve none in Illinois. (206) We use assigned cars at foreign line mines on the Alton, The Chicago & Illinois Midland, and the Louisville & Nashville. In the case of the Colorado Southern and the Denver & Rio Grande we furnish about half the cars and they furnish the other half. The other half must be supplied from their commercial supply. If our contracts with mines on those lines require us to furnish any cars at all, I am not aware of it. We furnish 50 per cent by reason of our obligation to the originating railroad as distinguished from our obligation to the mine. (207) It is an agreement between the railroad and ourselves, not between the mines and ourselves. As between our railroad and these railroads, we furnish cars for commercial coal. As to whether these are really not assigned cars in the ordinary sense, they are to this extent—that if we fail to furnish that number of cars we fail to get our coal. Consequently, it is to our interest to see that the number of cars called for every day for our fuel from those mines is delivered to those mines to insure our getting our coal which they have assured us they would see were spotted to the mines for our coal. I am not able to say whether
2478 those cars are placed in excess of the distributive share of those mines, and do not know whether they are assigned cars, in the sense that the expression is used here, on those lines. In the case of the New Mexico mines we send in practically all of the cars during periods of car shortage. At times the originating line, in this case the El Paso & Southwestern, are able to help us out on the car supply. (208) When we can we get our coal under the commercial distribution. We do not send in any cars to the El Paso & Southwestern for commercial coal in periods of car shortage. They provide all of the cars for commercial coal. I do not know whether the cars we send in for our coal on that railroad are furnished in excess of the distributive share. Our situation west of the Missouri River is not altogether similar to that of the Union Pacific. It is for the territory through the central and northwestern part of Kansas, but not through southwestern Kansas.

OCT. 23, 1923.

J. M. FERGUSON, called as a witness, and having been duly sworn, testified as follows (211):

Direct examination by Mr. FLETCHER:

I live at Irwin, Tennessee, and am superintendent of transportation of the Carolina, Clinchfield & Ohio. The return to the questionnaire showing that the C., C. & O. was not using assigned cars as of October, 1922, is correct. Prior to that time the C., C. & O. did not use assigned cars for the purpose of obtaining railway fuel, but in early November, 1922, we did begin that arrangement of the assignment of cars for railway fuel.

By Commissioner AITCHISON:

As to the information on another exhibit, Exhibit 52 (214), showing that the C., C. & O. did employ assigned cars in securing fuel dur-
ing the 1920 shortage, in 1920 I have no recollection of any
2479 such thing after March 1. I was not connected with that
department in January and February, 1920. I began with them in March, 1920, at the end of Federal control. As to whether they had a shortage after that, I think they had a shortage during Federal control. To the best of my knowledge they did not use assigned cars after Federal control.

By Mr. FLETCHER: (214)

It became necessary in the latter part of 1922 to use assigned cars for the reason that we were unable to get our contracts filled, due to car shortage. The Carolina, Clinchfield & Ohio gets its coal from the Clinchfield mines over in Virginia (215) on their own rails. I think the exact date when the arrangement to assign cars was consummated was November 10. At that time the C., C. & O. took only the partial output. The Southern Railway was getting fuel coal from some mines owned by the same company and they assigned cars for the output of one mine and the Southern and C., C. & O. took the output of another mine jointly. Each mine furnished cars for that fuel. Only one mine furnished the C., C. & O. fuel. It took the partial output of a mine which was sufficient for its supply. As to the necessity to go to the assigned car basis, we had anywhere (216) from 30 to 50 per cent car supply during October and November and we were not able to get sufficient fuel to keep our locomotives going. It was the only plan we knew of by which we could get sufficient fuel. The assigned car practice continued on the C., C. & O. until the car shortage ended about April, 1923, and during that time we secured our fuel on the assigned car basis. I do not know of any way by which a railroad can be assured of a dependable supply of proper coal in times of car shortage except by the use
of assigned cars, unless they store a very large amount of coal.
2480 As to how much coal we had in storage in November, 1922,
we do not store any coal. We were within a hundred miles of the mines (217) located on our line and had not previous to that time had much trouble.

By Mr. BALLARD:

I mean previous to the fall of 1922. It is rather expensive to store coal and we did not resort to it.

By Mr. FLETCHER:

Car shortages were not usual with us prior to the time I mentioned, namely, in November, 1922. The C., C. & O. owned sufficient coal cars to take care of its output, as fast as it has been heretofore, and those cars are used very largely in the movement of coal to southeastern territory. They come back to us usually with considerable regularity.

Cross-examination by Mr. E. BALLARD:

There are 29 mines I think, all told, on our rails, with an aggregate capacity of about 315 cars per day. (218) They do not work on Sundays. Our annual consumption of fuel coal is about 350,000 tons or about 20 cars per day. As to how many contracts we had in October and November, 1922, we only had one contract with one corporation. The contract did not cover any particular mine. This coal corporation operates nine mines. Our contract called for an average or daily supply of 20 cars per day. The capacity of the nine mines is about 210 cars per day. (219) As to our car supply prior to November, 1922, we had a considerable shortage right after Federal control. The cars seemed to be badly scattered, due
2481 to the previous coal miners' strike. Beginning with the end of Federal control my recollection is that we had around 60 per cent of full supply for quite a while, continuing until about the end of the year 1920. From these same mines we were able from March 1 to the end of 1920 to get sufficient fuel to take care of our needs, the mines with whom we had contracts. They filled our orders fairly well on a 60 per cent car supply. As to the amount of coal we would have to store in order to do away with the assigned car, under present circumstances we would not (220) have to store any, when we have full car supply. We are not using assigned cars now, because it is not necessary. As to the amount of storage, it depends. I scarcely know because we have never attempted to store any coal. No railroad stores coal on our line, except a few months ago the coal corporation did store some coal for another railroad.

By Mr. FLETCHER:

65 per cent of our tonnage is coal.

By Mr. E. BALLARD:

The railroad for which coal was stored was, I understand, the Charleston & Western Carolina. There is around a thousand cars in storage now on the ground, and they are loading it out. (221) That is about 50 days' supply. The first two or three months of the year 1921, our car supply ran around 50 or 60 per cent, and then we had almost full car supply during the summer months. In the early part of 1922 the car supply was fairly good, and during the summer of 1922, very good. In the fall of that year it was very short. Our trouble began along about the first of September.

By Mr. BROWN:

The mines on our line are not producing more coal now than they did in 1922 (222), and the mines as a whole, I should
2482 should say, did not produce more coal in the fall of 1922 than that produced prior to that time. In the fall of 1922 a good many of our cars moved during the strike into the west and had not returned to us. Our coal ordinarily does not move to the west. If we had had those cars on our line in the fall of

1922 I think there would have been no necessity for assigning cars. That was an abnormal circumstance, but it is likely to happen any time. We are shipping a little coal west now.

By Commissioner AITCHISON:

We are not getting interchange in equalization. We do insist on it (223) and have been able to make our insistence good, but we ran short in the meantime before we could get that insistence. I do not mean to say that we could get along now with a 60 per cent car supply, because the mines refuse to give us our full quota. They did it for a long time, and suddenly they decided they must prorate all their orders, including the railroad fuel orders. They will not give us a preferential supply. If they have not got a 100 per cent car supply they cut our fuel order down prorata with the others. The mine ratings were changed after the assigned car basis began, a very little change being made particularly in the larger mines. (224) I suppose if we had 90 per cent car supply we would probably be able to get along without having to assign cars. If we had 80 per cent we would not have to assign as many cars as if we had 60 per cent. We must have practically a full car supply in order to get our full coal. If we were able to secure equalization so that we would have the equivalent of our supply, I do not think we would need to assign cars. Of course, it is true that quite a good deal of our coal moves to tidewater where it is delayed in cars awaiting boats.

2483 By Mr. BROWN:

As to whether we assign cars to the company from which we get our coal, or whether that company assigns them to the mine, we agreed with the coal company to take the coal from a certain mine, on account of the capacity. (225) We assign cars to that mine.

By Mr. FLETCHER:

The mines on our railroad are non-union.

By Commissioner AITCHISON:

There is not any community of interest, to my knowledge, at this time, between the Clinchfield Railroad and the coal company from which it procures its coal.

By Mr. LIVERIGHT:

We have a written contract with this corporation providing for so many tons for the year at an average daily rate at a certain price. (226) I do not recall the price. At the time this company determined to furnish us coal they were getting around 50 per cent of their requirements and then they said "When you give us a full car supply we will give you four fuel order." That corporation is the Clinchfield Coal Corporation.

By Commissioner AITCHISON: (227)

As I recall we did not have trouble in getting our fuel in the summer of 1920. I do not recall any trips by Mr. Campion to see

the bureau of service of the commission. I think we did have trouble getting fuel coal, but we got by, I think, by insisting upon the coal company giving us our fuel supply, that we could not operate without, to haul their commercial coal. There would be days on which they would give us probably 10 or 12 cars when they
2484 should have given us 18 or 20. They said "We have got to take care of our other orders partially, as well as yours." Then they would go ahead and give us a few extra cars to tide us over.

By Director BARTEL: (228)

As to whether we availed ourselves in 1920 of the service order of the commission permitting assignment of cars under certain conditions, we did not. As I recall it, we did not have to use the assigned order at all until after 1922.

By Commissioner AITCHISON:

As to how severe the car shortage on our line was in 1920, we had about 50 to 60 per cent right along. We did get down at one time, I think, to 30 per cent. I do not recall whether that was 1920 or early 1921.

By Mr. CURRY:

We have a yard called Bostic Yard, on the C. C. & O., at which coal is stored. The Clinchfield Fuel Company have about a thousand cars stored there at this time. As to whether it has been the practice to store any large quantities of coal at Bostic Yard, during several summers, we have. (229) I do not know the exact figures as to the maximum amount. I think 150,000 tons, probably. There was no coal stored there for our railroad. Prior to this last year they stored it and sold it to various railroads. Several railroads got from there, I think. We got our coal direct from the mines. The storage of coal there had nothing to do with our being able to get along without assigned cars up until October, 1922. There was an entire year during that period that they did not store any coal at Bostic. They did not have it to store, on account of the car shortage.

2485 C. B. STROHM, called as a witness, and having been duly sworn, testified as follows: (230)

Direct examination by Mr. FLETCHER:

I live in Chicago and am superintendent of transportation of the Atchison, Topeka & Santa Fe. The reply to certain questionnaires that the A. T. & S. F. did not use assigned cars in October, 1920 or 1922, is correct, as we understood the rule at that time. It is not correct now. (231) My understanding of the assigned-car rule was such as was published in car service division circular C. S.–31, revised.

By Commissioner AITCHISON:

As to whether that rule includes not alone the placement but also the rule with respect to counting over and above cars commercially allotted but subject to limitations as to the rating of the mine, I understand it does. Our position is a little peculiar in that we own about 6,000 drop-bottom stock cars and about 2,500 drop-bottom ballast cars, that we throw into the company coal use when necessary, and those cars are not acceptable to the commercial coal loaders.

By Mr. FLETCHER:

We use those cars exclusively to secure our own fuel in time of car shortage, when necessary. We have not considered such use of those cars as assignment cars (232) so long as we give the commercial shippers the coal cars. Approximately 60 per cent of our requirements in the way of fuel is taken care of by oil and 40 per cent by coal. We require about 140 cars of coal per day to take care of that 40 per cent. We receive it from mines on our line, with the exception of some coal that we receive from mines on the Burlington In Illinois. It comes to us at Galesburg and, I believe,
2486 from the Wier mines. (233) Also a few cars a day come off of the Minneapolis & St. Louis from mines in the vicinity of Monmouth, Ill. The balance all comes from mines on our own line, some of which we own and others that we have contracts with.

By Director BARTEL:

We consume approximately 140 cars of coal per day or about two and one-half million tons a year.

By Commissioner AITCHISON:

We do not assign any cars at the present time except these stock cars.

By Director BARTEL:

Last year we used 2,266,000 tons of coal and on account of turning more engines into oil this year we estimate we will use two and a half million tons. At 50 tons per car that figures 140 cars per day. Some of our cars are smaller than 50-ton cars, some being 25-ton coal cars.

By Mr. FLETCHER: (234)

As to the coal which we secure from the Burlington, we do not send cars to that railroad for the purpose of securing that coal. As to the coal off the M. & St. L., we send our cars for it. The cars which we send for the M. & St. L. coal are ordinary gondola cars. I do not think the mines there are equipped to load covered cars.

By Commissioner AITCHISON:

As to whether the cars to the M. & St. L. are assigned under the rule previously referred to, we have just been getting coal from that line for about a month and we have not had any coal shortage,

and they have been able to fill the orders 100 per cent. They
2486a are not assigned at the present time unless the M. & St. L. would call them assigned, and I do not know whether they do or not.

By Director BARTEL: (235)

We are not taking the entire output of that mine. I do not know whether the M. & St. L. secures its own fuel without the use of assigned cars.

By Commissioner AITCHISON:

I hardly think that mine is an entire output mine because we receive only 4 or 5 cars per day on that order. We would expect to turn cars over to the M. & St. L. for our fuel requirements whether there was any assigned car rule or not, but if we could not turn the empties over under the rule, we would not get the coal.

I do not know whether the rule is being used or not. (236) We would expect in the ordinary course of railroad practice to give coal cars back when we got coal cars from a connection, and that is regardless of whether the coal which we got is for ourselves or for a private consignee on our line. We get those few cars of coal just to furnish the coal chute near Monmouth to save the haul. I understand that we could get this coal if we furnished the cars and sent them over there. If we did not have the cars to send we would not get the coal. We would get it somewhere else. We would haul it probably 50 miles further from a mine on our own line. We try to buy coal to save transportation at the nearest mines to where our chutes are. As to whether the Sante Fe has assigned any cars under the definition previously given, I know that we have furnished mines from which we receive the company coal 100 per cent cars, while other mines from which we do not receive company coal have not been furnished a 75 per cent supply. That is all on our own line. (237) As to whether the A. T. & S. F. up to the present time has used a single assigned car on a foreign line, I do not see how
2487 I can tell what is going on on a foreign line. As to whether it has been using assigned cars, I do not know.

By Mr. FLETCHER:

The Chicago, Burlington & Quincy furnishes cars to a mine on its line from which we get coal, and we return the Burlington cars as fast as they are unloaded.

By Commissioner AITCHISON:

In the course of a month or so it equalizes in the same way.

By Mr. FLETCHER: (238)

It is the practice for the line that receives the haul to furnish the cars for commercial coal. As to company coal, you make any kind of a dicker you can to get company coal. We have about 6,000 of these stock cars that are used in the transportation of company fuel and about 2,500 of the ballast cars. They are

not used at all for the transportation of commercial coal. (239) We furnish that kind to the mines with which we have contracts in sufficient numbers to take care of our contract requirements, without regard to the car supply for commercial purposes, when cars are short. When cars are plentiful we use coal cars principally. They are a little easier to handle than the stock cars for the loaders, but they will dump into our chutes just as readily as coal cars will. There are certain times of the year when we need the stock cars for stock. We have coal car shortages on the Santa Fe when we cannot furnish to mines producing and shipping commercial coal all the cars they order. Our loading is about 350 car loads per day of both commercial and company coal. (240) The commercial mines are located in Illinois, Missouri, Kansas, Colorado, and New Mexico, and the mines from which we secure our company coal are located in Illinois, Kansas, Colorado, and New Mexico.

2488 By Mr. BROWN:

Our Illinois mines are located at Toluco on our main line.

By Mr. FLETCHER:

We assign cars to secure our supply of oil. We have cars which are used exclusively in the transportation of oil for fuel purposes.

"Commissioner AITCHISON. Is that before us now?

"Mr. FLETCHER. No, sir: I just wanted to get that fact for a certain reason, and if your honor will excuse me I will not take the time to explain because I am not going to ask any more about it."

By Commissioner AITCHISON: (241)

We have not assigned open-top equipment for our own loading on our own line. We make a ratable distribution of that. The cars which we assign over and above the ordinary commercial distribution are our stock cars and ballast cars. As far as foreign line cars are concerned (242) all I know about that is that we turn over a sufficient number of cars to our connections to equal the amount of coal which we expect to get from them, and I do not know whether the connections assign those cars over and above the commercial ratable distribution or not. I would say that half of our company fuel is loaded in stock and ballast cars, probably two-thirds in stock cars and one-third in ballast cars, because we have a greater number of stock cars. As to why in 1920 we had coal to sell commercially, the mines that we owned evidently produced more coal than was needed for company use. We are now selling coal commercially from the mines that we own. (243) We own two mines, one in Illinois and one in Kansas. The mine in

2489 Kansas has a capacity of 4,400 tons per day. The company coal we require from that mine is 1,400 tons per day. Over what we require they can sell commercially, and they are only working about half time at present. We assign cars to that mine as far as ballast cars are concerned, but they can not load

the stock cars at that mine. As to why we don't use that coal ourselves instead of selling it, we do not need it unless we haul it unreasonable distances. (244) The mine, of course, gives first preference to company coal, and what we do not require they are allowed to sell commercially. They are not furnished over the proper proportion of cars for commercial loading. I mean by "proper proportion" the same as other mines around there that are privately owned. If furnishing ballast cars to this mine 100 per cent is assigning cars, then we do. The mine gets 100 per cent of its requirements. It is only working half time now. As to whether other mines are getting a lesser percentage of their requirements, that is possibly true. (245) The mine gets the same per cent for commercial loading and then gets cars in addition for railroad loading, ballast cars particularly. It is rather hard to check that up, but we try to do it. (246) If there is a 75 per cent car supply, and we assume for easy figuring that 20 cars a day is the rating of this mine so that 15 cars would be what the other mines would get we would put in an extra 5 cars and make it 100 per cent. (248) I don't think they are selling 10 per cent commercially now. The reason is no market.

2490 By Mr. FLETCHER: (250)

In the case cited of a twenty car mine, if the mine had orders for fifteen cars of commercial coal and our car supply was 75%, and the Santa Fe Railroad needed three cars of coal for company use (251) we would not give them fifteen cars for their commercial loading and then three of these ballast cars in addition to the fifteen cars. That would be an unequal distribution. We would give them three ballast cars for railroad fuel loading and twelve cars for commercial loading.

By Commissioner AITCHISON:

In times of shortage of coal that mine usually runs at capacity if it can get the cars.

Cross-examination (252) by Mr. E. BALLARD:

As to furnishing these ballast cars to mines over and above their pro rata share, I meant this: If we had four mines with twenty cars capacity each and we had twenty coal cars to distribute altogether, we would give those twenty coal cars to the three mines that loaded commerciallly and divide them up pro rata, giving each seven. We would then give our company coal mine twenty ballast cars, a full supply, for company coal. During a car shortage we do not get all our company coal in ballast and stock cars from mines on our line. We get some in coal cars, if there are enough coal cars left after taking care of the commercial coal. (253) We get practically all of the coal at these certain mines that load company coal in ballast and stock cars. The other mines that load company coal get their proper proportion, so that from some mines we get company coal on the pro rata car distribution during a shortage. Ninety per cent

of our coal comes from mines on our line and 10% from these Burlington and Minneapolis and St. Louis mines. Of that
2491 90% we get during a period of car shortage, some in ballast and stock cars on a full car supply and the remainder in coal cars on a pro rata supply (254) I would say ⅔ of it is received from mines to which we furnish stock and ballast cars and ⅓ is received in coal cars. As to why if our company mine and these other mines can put coal in ballast cars the commercial mines can not do so, they cannot unload them, I understand. They are center drop. The center opens out, about two feet in the middle of the car. As to whether there would be any more difficulty in unloading it than in a fixed bottom car, well, they dump in the middle of the track. They could not be shoveled out like a fixed bottom car because the bottoms are V shape. (255) We have tried furnishing those cars to commercial mines and they decline to accept them in times of car shortage.

ROBERT COLLETT called as a witness and having been duly sworn testified as follows:

Direct examination by Mr. FLETCHER:

I live in St. Louis, Mo., and am fuel agent of the St. Louis & San Francisco Railroad. (256) As to the answer to the questionnaire indicating that the St. Louis & San Francisco was not using assigned cars on October 1, 1922 nor in 1920, that is substantially correct as our people understood the definition of "assigned car." We do not take the entire outputs of the mine, seal the mine and furnish 100% car supply. I will read the answer of our superintendent of transportation to the inquiry of the car service division, not the questionnaire. It is: "The present decision means that it will not be possible for us to send our coal cars to the east side lines or through the Chaffee gateway, for those cars to be restricted in the mine territories for the loading of our fuel. It further
2492 means unless lines on whose rails coal is produced (257) are able to furnish all mines 100% car supply that our fuel supply would be in danger. It would also mean a pool or an equalization of open top equipment through the various gateways or routes that this or any other carrier might be dependent on for fuel supply. It has been customary with this company for some time past, in order to protect its fuel requirements at mines in Illinois, to deliver to roads on whose rails these mines are located our own equipment, these cars being allocated to mines producing our company coal, which is, in a sense, assigning the cars. This, together with the practice of placing our own equipment at mines on our own rails and receiving a preferential fuel supply in the event we are not able to furnish 100% car supply to all mines, is the extent of assigning coal cars in so far as this hearing is concerned. We have mines in Alabama who have certain contracts with southern lines, which lines do not have any mines, but do have a supply

of open top equipment, and we accept to assign these cars to those mines producing coal for those connections. For example, the Seaboard Air Line has a contract on our rails and we accept their coal car supply, place at mines having contract and load those cars back to the Seaboard Air Line. (258) If this feature was restricted under present operation of car service rules, it would mean the S. A. L. would have no assurance of or control of their equipment in so far as their own fuel supply is concerned."

That is all of the letter, but that explains the position. The letter is dated October 12, 1923. This letter in its entirety is not exactly the letter that was made from our president to the car service
2493 association. (259) Just for convenience, I put in the superintendent of transportation's letter, and in that he added one or two paragraphs of his own comments, but is not the reply that is in the record. (260) The Frisco obtains approximately 20 per cent of its fuel supply from Illinois. As to whether that is on so-called short lines in the St. Louis district, it is on short lines and also one mine is on the Louisville & Nashville. The Frisco sends its cars off its line assigned to those mines for the purpose of obtaining that fuel. To that extent, if to no other extent, assigned cars are used by our railroad.

By Commissioner AITCHISON:

The assigning is done by the carrier upon whose lines those mines are located; but we do know in placing our contract there, and that has been the practice heretofore, that those cars will be used for no other purpose. (261) The cars are counted in the distribution of the mine rating. Another railroad has a contract on the Louisville & Nashville which, together with our own, takes up the supply from that mine, so that it is in effect an assigned car proposition.

By Mr. FLETCHER:

If under some order of this commission we would not be permitted to secure our cars off our line under special assignment to those mines in Illinois where we secure this quantity of fuel, that would have a harmful effect upon our operation. We would not be assured of a regular supply of fuel. We would have to have a very much larger number of cars in that St. Louis gateway to send over
2493a there to insure enough coal coming to us. If it was a 50 per cent car supply, we would have to have at least twice as many cars. That would, of course, interfere with our operation, because we could not furnish our commercial orders for cars. Another thing, it would affect us on account of not coming in the right kind of equipment, and probably not the right kind of coal (262), because on that division we employ mechanically fired locomotives, with Streets stokers, that have to have especially prepared coal, one and one-half inches down. The coal we secure in Illinois we use from St. Louis, Mo., to and including Lebanon, Missouri, west about 190 miles towards Kansas City; towards Springfield,

Missouri, including St. Louis, East St. Louis, and Newberg. Then also we use Illinois coal from another mine field down toward Memphis, on the River line. The coal from Illinois comes from the Sparta field and is floated across the river at St. Genevieve and received by us at that point. About 25 per cent of our total fuel requirements is fuel oil. The balance of it we receive from five mine fields in Missouri; a small amount in Missouri, Kansas, Oklahoma, Arkansas, and Alabama. (263) We get a larger percentage from Alabama than any other. The Alabama coal we use from Willow Springs, Missouri, east; from Birmingham to 190 miles north of Memphis. (264) As to that coal received from the Alabama field and from Missouri and from other points I have enumerated, we do not assign cars to give them 100 per cent car supply, or, as I have stated, seal the mine; but we do expect and receive preferential coal supply in times of coal car shortage.

By Commissioner AITCHISON:

That is, out of a commercial distribution of cars to these mines they will supply our wants before they fill those of other
2494 customers. They would have to do that at times or we would have to resort to confiscation.

By Mr. FLETCHER:

In the Alabama field we receive some cars from the Seaboard Air Line and we respect those cars for those mines. We do, however, count those cars against the mine rating in our distribution.

By Commissioner AITCHISON:

(265) We would deliver to the mines the cars that the Seaboard set over there for their supply, and it might be more than the mine rating for a given day.

By Mr. FLETCHER:

We gave them no additional cars beyond that. That is the Traer rule as I understand it. Our coals vary widely in character and in preparation on account of our locomotives with the Streets stokers, and they operate on our heaviest traffic divisions. It is impossible to use any other kind of coal than this size coal. We can use various grades of coal in them, but it must be this size, and the character of our coals is so widely different that not to segregate those coals, or to use them indiscriminately, would seriously interfere with our service.

By Director BARTEL:

When the Seaboard sends cars onto our road for their fuel supply (266) they do not take the entire output of mines, as I understand it, but I am not entirely clear on that. If the Seaboard should send cars to that mine on a given day for their fuel requirements and the cars so shipped exceeded the pro rata share, we would undertake to equalize the excess over the pro rata share on that day the next

day. As to how we handle our car supply down there, we
2495 have a car distributor who is employed by the operators and the Frisco Railroad jointly, in order to watch our car supply and get an even mine rating, but our practice is, and we handle the Seaboard's cars the same way, that they are sure to get their fuel supply from those mines, although they do undertake to equalize

By Mr. BALLARD:

(268) I have been fuel agent of the Frisco since January 15, 1923. Mr. J. C. Bryan was my predecessor. I know Mr. Eugene McAuliffe who was fuel agent of our line from approximately 1905 until about 1915. I know Mr. Charles F. Richardson, who was fuel agent of our lines from about 1908 to 1910. This is just from memory and not exactly correct. At the same time, Mr. Eugene McAuliffe was general fuel agent of the Rock Island-Frisco property. Our fuel problem does not differ greatly to-day from our problem between 1905 and 1915, except that at that time we had no stoker fired locomotives. Mr. J. H. Doggerel, our superintendent of transportation, wrote this letter to the general manager. (269) My duties as fuel agent are to get the fuel supply on the railroads. I come in contact with that. I am not a transportation officer, further than that. As to the following statement in this letter:

"It has been customary with this company for some time past, in order to protect its fuel requirements at mines in Illinois, to deliver to roads on whose rails those mines are located, our own equipment, these cars being allocated to mines producing our company coal, which is, in a sense, assigned cars." I would not know whether those cars are going to those mines in excess of their pro rata share.

I don't know anything about that. (271) My under-
2496 standing of the position of the writer of this letter is that he was not fearful of our being able to send our cars over [to other lines], but he was fearful that the number of cars that we would send over, which would be sufficient ordinarily to take care of our fuel supply, would not protect our fuel requirements, because of the shortage of cars in the mines. We would just simply put our cars in the pool in that territory, and could not be assured of how much coal we would get back, nor in what kind of equipment it would come, or of the kind of coal it would be. (272) That is to say, the identity of our cars would be lost. That is a pretty long haul up there for the cars, and there would not be opportunity to get other cars up there to furnish the supply. The third page of this letter refers to the subject matter of this case. (274) Mr. Doggerel, superintendent of transportation, wrote this letter.

The paper referred to was offered in evidence by Mr. E. Ballard and was received, over objection by Mr. Fletcher, on behalf of the American Railway Association, as Exhibit No. R–7.

By Mr. ROPIEQUET:

(279) As to the transportation arrangements that we have on the east side, through the St. Louis division, with the carriers from whom we get coal, I cannot say except that under the present arrangement that we are working under now, we would get our cars returned to us, especially on those short line railroads. Our experience with the trunk lines was that we had difficulty getting them back. In referring to the short line railroads, I include such roads as the East St. Louis & Suburban. (280) We had a contract with a mine on that road. I don't know whether our cars placed at the mines on the East St. Louis & Suburban gave that mine any
2497 preferential car supply. We take two preparations from these mines, mine run and stoke. The other coal out of the preparation that we take is marketed commercially, ordinarily. There might be times when we would take it. It does not go to St. Louis in our own cars. The coal would not come through in our cars, as I understand it, unless they were furnishing the coal to us, in place of our mine run. In the summer time the mines might furnish us the coal that was made after the screenings were taken out, as our mine run coal, when they did not have a market for it. We do not take the outputs of mines. (282) No coal was sold commercially that was shipped to the Frisco Railroad. I am only familiar with the period from January 15, 1923. As to that period we took off the suburban lines, and the Louisville & Nashville also. We are not taking the whole output of a mine. (283) There may be commercial coal moved in our cars over there, but no cars that are sent for our fuel supply are applied to commercial loading. It is my understanding that the suburban will return to us the cars we furnish the suburban.

By Mr. BROWN:

We store some coal on our road; not as general practice, except in times of anticipated suspension. We have about 10,000 tons in storage now, about 8,000 at Harvard, Ark., and about 2,000 at Springfield, Mo.

By Mr. LIVERIGHT:

(284) When mines receive more than distributive share of cars through the receipt of cars for the Seaboard fuel contracts, that mine is equalized on a subsequent date as promptly as can be. It might be the next day. It would be within a very short time.

By Mr. CURRY:

(285) As to whether if we send cars over in the Illinois field to mines off our line, those mines would be given cars
2498 in excess of the pro rata share of those mines, that might be temporarily. I do not know whether there is an equalization as we equalize in the Alabama field with the Seaboard. I would not know positively whether the assigned car rule is in force in the Illinois field in regard to the cars which were sent to Illinois. I

know that in times of car shortage, substantially, we would get back or we have been able to get back from the short line railroads enough coal, although we have had a good deal of trouble from that source in times of car shortage. (286) There has not been a car shortage since January 15. We have been getting fuel from off line mines as long as I can remember. It goes back 20 years. As to whether when Mr. McAuliffe was there it was the practice to secure that fuel without assigning those cars and having them placed in excess of the pro rata share of the mines, some arrangement was anticipated that our cars went over for our loading, to the best of my knowledge.
2499 (286) As to whether those assigned cars sent to the foreign lines are charged against the mines or not, I would not know all the details of transportation, handling of cars. I would not know whether they are charged against the mine and equalized the next day or within a reasonable time. (287)

By Mr. FLETCHER:

As to the cars we sent over to those lines on the Louisville & Nashville and the Short Lines, I would not know positively whether there were car shortages on those lines or not. That would antedate my position at present.

By Commissioner AITCHISON:

Since our present contract—and that also applied from the first year and last year—our cars have been sent to the St. Louis & O'Fallon and to the Suburban Line, and those mines are also served by the Louisville & Nashville and to the C. & E. I., Rutledge & Taylor and Livingston.

By Mr. FLETCHER (288):

It is my understanding that our railroad and the M., K. & T., jointly, take the output of a mine on the Louisville & Nashville, and that they furnish the requirements without reference to the car supply on the Louisville & Nashville for commercial loading. To that extent I know that the Louisville & Nashville, in handling our fuel cars, assign the cars to that mine. As to car shortages on the East St. Louis and Suburban, I do not know positively, but they do not seem to labor under the same car shortage as the other lines do, but I don't know that.

A. L. BERGFELD (289), called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. FLETCHER (290):

I live at St. Paul, Minn., and am superintendent of transportation of the Great Northern Railroad. The commission's
2500 decision in this case, in stating that the Great Northern did not, in October, 1922, use assigned cars, and in not listing it as one of those that used assigned cars during the 1920 shortage, is correct. The Great Northern has not found it necessary to use

assigned cars in securing its railroad fuel. Possibly the commission might consider as an assigned car the fact that at certain periods we would insist upon the loading of our company coal in preference to commercial coal, but that would last for perhaps 3 or 4 days only, and there were many times when we loaded commercial coal in preference to the company coal, and ran ourselves short in order to meet a serious condition in the country. That would depend upon the exigencies of the situation. (291) The largest part of our fuel supply comes off the docks at the head of the Lakes. That supply is built up during the navigation season, and from that supply we furnish our company needs for the territory east of Wolfpoint, Montana, which covers about 4,600 miles. The balance of the railroad, up to 1922, was supplied from mines in Montana, the largest producer in Montana being a Great Northern mine. There are some half a dozen smaller mines which, in the winter time and in the fall of the year, give us company coal under contract, and those contracts are largely placed with those small mines, in order to enable them to operate, and their surplus over and above the contract with the Great Northern is a commercial proposition. We have made no distinction in those mines in the car supply, as between the loading of the small amount of coal received from them for company purposes and their loading of commercial coal. Further west—not in Montana, but just across the border, at Fernie, which is in Canada—there is another company mine, which produces coal sufficient to take care of the needs west of the Rocky Mountains.

I should say from 50 to 55 per cent of the coal burned on our
2501 system is secured from the docks. (292) The rest of it comes from these mines which I have described, in the Western States and in Canada. In transporting this company coal from the docks, we use box cars to a very large extent. The reason that box cars are used is that it carries the coal into the grain-producing territory and makes them available for grain loading. We also load a great many open cars, and the demand for open cars for coal loading at the head of the Lakes commercially is increasing, because of the facilities which industry is equipping itself with for the cheaper unloading of that class of equipment. What I have in mind is largely hopper-bottom and dump cars. As to the commercial coal we originate outside of the docks, at the company mine in Montana there is no commercial coal whatever, and it produces more coal by 150 per cent than all the other small mines in Montana combined. The smaller mines in Montana operate only (293) during the fall and winter months, and 2,000 tons per week of commercial coal, I think, would cover it. In addition to that, we have a lot of mines in North Dakota which produce lignite coal, but this is strictly a commercial proposition. There is no company coal bought from those mines because the coal is unsuitable for railroad use. The loading of the commercial coal at the Canadian mine is practically nothing. We have another commercial mine out on the coast,

but that, too, is a restricted commercial mine, and is a small producer. Approximately 92 to 95 per cent of the coal produced west of Wolfpoint, Montana, is used for company fuel.

Cross-examination (294) by Mr. CURRY:

Our railroad owned mine, other than the one in Canada, furnishes coal to the railroad practically exclusively. Commercial loading at that mine for our line is practically nothing. As to the commercial loading shown in Exhibit 16 there was commercial
2502 coal, but compared with the company needs up to the first of this year, the commercial coal was negligible.

By Mr. FLETCHER:

We got a lot of coal from the Illinois mines during the 1919 trouble and last year's strike trouble. We sent our cars out for that purpose the latter part of last year, and the first part of this year.

By Commissioner AITCHISON: (295)

The cars were delivered to the Burlington, billed to the Sunnyside mine at Herrin, Illinois, for a mine of that company of which we had bought the entire output. I can not say as to how they were counted by the Burlington, but in checking back the cars, they came back to us loaded with company coal, with very few exceptions.

By Mr. E. BALLARD:

In other words, the identity was preserved. During the remainder of this period when we did not send our own cars down for Illinois coal, the coal came in miscellaneous foreign cars. That period, I should say, was from September, when the coal production was resumed, to December 1, 1922. From September, 1922, to April, 1923, we received about 11,000 or 12,000 cars of coal. (296) That was practically all the Illinois coal we got. The only Great Northern cars we delivered to the Burlington were cars billed to the Herrin mine. We received a lot of coal from other Illinois territory throughout this period, and did not send cars down for that. I am unable to say what proportion of the 11,000 cars we got during this period in our own cars from the Herrin mine, but I would say approximately 18 cars a day from the middle of December to the middle of March.

W. D. BECK, called as a witness and having been duly sworn testified as follows:

2503 Direct examination by Mr. FLETCHER:

I live in Chicago and am superintendent of car service of the Chicago & North Western Railway Company. I have no official relation to the C., St. P., M. & O. I am familiar with the transportation of coal, in a general way, over the lines of the North Western Railroad. The amount of company coal and commercial coal originating on the Chicago & North Western varies by the season. The company coal will run from 250 to 330 cars in southern central Illinois, a few cars from Spring Valley, (289) a few cars from Hudson,

Wyoming, and from 30 to 100 cars in the State of Iowa. The commercial coal in southern Illinois will run from 20 to 125 or 150 cars; in Iowa, from 10 to 50 or 60; in Wyoming, perhaps 25 or 30.

By Mr. ROPIEQUET:

When I refer to southern Illinois, I mean in Macoupin County, and the nthere are mines in La Salle County.

By Mr. E. BALLARD (299):

The company coal will run from 200 to 400 cars on our whole line, and the commercial coal will run from 20 to 175 or 200 on our whole line.

By Mr. FLETCHER:

Speaking on an average, and taking the months as they run, I suppose about 30 per cent of the coal originating on our line is commercial and the balance company. The largest amount of coal that we take for company purposes is from our central Illinois field. (300) I think those mines are all in Macoupin County. Our mines are owned 100 per cent directly or indirectly by the North Western Railroad. All the mines that we take coal from in that district are owned by the North Western. The fuel coal which originates
2504 in this Illinois field goes into eastern Iowa, all of Illinois, practically all of the State of Wisconsin, some of the upper peninsula of Michigan, and in Minnesota to a point ordinarily about 150 miles west of the Mississippi River. As to coal from other fields, we have some mines owned by the North Western in Iowa, in the neighborhood of Buxton, and we take some coal from privately owned mines in that vicinity for our own use. (301) The Wyoming mine is an independent corporation with which the North Western has no connection. We take coal from that mine. As to the amount of coal we take, I am not familiar with the contract. As to whether the statements in the commission's report that we do not assign cars is correct, I have heard a lot about assigned, consigned, and unassigned cars since I came down here, and while I am not familiar with the answer made to the questionnaire, I rather judge that it was perhaps misunderstood or there was a misapprehension. (306) As I understood the term assigned car, the answer to the questionnaire that the C. & N. W. was not using assigned cars is correct. (307) The commercial coal is almost negligible with us. Our company coal is a big factor, and we provide cars for the company coal, and under ordinary circumstances take care of the commercial coal, but if we need company coal we provide cars for that coal in preference. We do not consider that as assigning cars, as I understood the term under the questionnaire.

By Director BARTEL:

As to whether in assigning cars we equalize later, we assign company cars to the company mines, and as far as we can—and ordinarily we make a very good stagger at it—we take care of the com-

mercial mines, which, as I say, are very small in number and production. We try to take care of the commercial mines. (308) As to whether we equalized by depleting the supply at the company mines and bringing up the same number of cars at the commercial
2505 mines as at the company mines, we would, if the supply of company coal on our railroad was sufficient so that we might continue to operate efficiently and close down our mines so that commercial mines might be picked up and we could get that business.

"Q. (By Commissioner AITCHISON.) Well, I think that the letter from Mr. M. Hewitt, jr., operating department vice president, ought to be put into the record here.

"MR. FLETCHER. We will be very glad to do that."

[The following letter was thereupon read into the record.]

Exhibit in evidence

CHICAGO & NORTH WESTERN RAILWAY,
OPERATING DEPARTMENT,
Chicago, November 9, 1922.

M. Hewitt, jr., vice president

DEAR SIR: Replying to your letter of October 30, 1922, file 536–12, with reference to information desired for hearing before Interstate Commerce Commission in Docket 13896, Mine rating and coal car distribution rules, and Docket 12530, Assigned cars, which will be resumed November 15.

The Chicago & North Western Railway Company is not following the practice of assigning cars for the protection of our railway fuel loading at mines located on our line, nor at mines located on foreign lines.

Yours truly,

M. HEWITT, Jr.,
Vice President.

Mr. M. J. GORMALLY,
Chairman Car Service Division,
American Railway Association, Washington, D. C.

2506 By Mr. FLETCHER: (309)

I have nothing to add except that if we are prohibited from assigning or giving these cars for our company coal we might at times find ourselves in disturbing straits.

By Commissioner AITCHISON:

As to whether the statement by Mr. Hewitt is correct, we put our system cars into our own mines to take care of our own fuel requirements, even though it might be necessary to run the commercial mines short on some days.

By Director BARTEL: (310)

As to whether our practice was any different at the time that letter was written than it was in July, 1922, I think not. As to the answer to the questionnaire in Exhibit 52, purporting to show assigned cars were used on July 22, 1922, I do not recall the questionnaire, so I don't know just why——

By Mr. FLETCHER:

Our car supply in October, 1922, was quite scant. It was better in July because the Federated Shop Craft strike had just begun, and the coal strike was in progress, and our supply was pretty fair at that time.

By Commissioner AITCHISON: (311)

As to whether we were assigning any cars on our lines or on other lines in 1920, I did not assume the position until later in the fall of 1920 and am not in a position to say positively what the practice was.

" Mr. FLETCHER. If your Honor please, I had no thought, in putting Mr. Beck upon the witness stand, to contradict any statement made there. My purpose was to show the large amount of company coal which they used, of coal originating on their line, which seemed to me an important difference as between that line and the great many other railroads that have assigned cars, and I am not
2507 insisting that the commission shall understand us as contending that in the case of the Chicago & North Western the answer to the questionnaire was incorrect. It seems to me that the commercial coal originating on that line is so small in amount—and that is the point that I wanted to make by this witness—that it would not be very significant on that road. Right or wrong, that is what I expect to argue. I do not expect to argue that they are assigned cars."

Cross-examination (312) by Mr. E. BALLARD:

Practically all the coal we get comes from our own mines. Besides our own there are a few shafts in Iowa, in the neighborhood of Buxton, from whom we take very little coal. I don't know whether those are part output contracts or merely spot purchases.

A. S. LEWIS (321) called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. FLETCHER:

I live at Scranton, Pa., and am superintendent of car service of the Delaware, Lackawanna & Western. (322) The answers to the questionnaires purporting to show that the D., L. & W. did not use assigned cars on October 1, 1922, but had used them in 1920, are correct. On October 1, 1922, we were not using assigned cars. In November, 1922, we did resort to the practice of assigning cars. (323) As to why it was not necessary in October to do this, the reason was that following the coal miners' strike we accumulated a surplus of soft

coal, and on the first of October we had practically three times our normal supply, which we were very desirious of reducing, but that supply was being augmented by coal unloaded from the boats in New York Harbor, of which we had a considerable supply before us.
2508 That coal came from Nova Scotia, England, and the Virginia district. The surplus we got during the strike was principally from England. As I recall it, it was something like 20 or 30 cargoes of English coal alone. (324) We had, as I recall it, 1,700 cars of soft coal in cars on the line on October 1, 1922, which was reduced to around 600 cars the latter part of 1922, and, as I recall it, there was a shortage of cars. We were not exactly short of cars, but we were running close; but there was a shortage of cars in the bituminous coal fields, and our supply had depleted to such an extent that we were obliged to get more coal. We could not get all the coal we wanted without delivering assigned cars, and therefore it was necessary to begin delivering cars for return soft coal loading. That rather took on larger proportions during the month of January, 1923. It reached its peak in that month. The car supply in the bituminous fields became sufficiently easy to make it unnecessary to assign cars about May or June, 1923. Since that time we have not found it necessary to make delivery of a very large number of cars on the assigned basis, although we are doing it to a limited extent at the present time. We get most of our fuel, under ordinary circumstances, from points off our line in Ohio and Pennsylvania. We send our cars off our line to those mines whenever that is necessary. On an average at the present time we consume about 100 cars a day. That fluctuates according to the amount of business moving over the line. (326) None of that coal originates on our own line. We have no soft coal operations on the D., L. & W. We do not take the entire output at all mines situated on other lines, but do at certain mines on those lines, about 60 per cent of our requirements being from output mines, and the rest from partial output. I know from our past experience that if we were not permitted to assign cars during certain periods
2509 we would have great difficulty in getting sufficient soft coal for consumption on our line (327) of the kind that is required, and at the time we want it, particularly during periods of car shortage on other lines. When occasion demands, we take cars away from the anthracite coal loading if necessary in order to obtain soft coal and avoid confiscating it. We burn a certain amount of anthracite for engine purposes.

Cross-examination by Mr. E. BALLARD:

As to coal from the part-output mines, we make delivery of cars in equalization of interchange for practically all of it, those cars being moved to the mines of the companies who ship us our soft coal and are used by them for loading in accordance with car service rules. I do not know whether cars are delivered to those mines in excess of their share, for the reason that the mines are located on their lines. I do not know whether there is an equalization. That is

true also of our bituminous fuel coal, from my own personal knowledge (328), although I know from the shipments that we get from the mines where we contract the total output that they must be getting only what they are entitled to.

By Commissioner AITCHISON:

For instance, if we have a contract for 15 cars a day at a certain mine on the Pennsylvania Railroad, that railroad does not put any more cars in than they are entitled to under their mine rating—that is, the total output. As to whether these mines get 100 per cent of their rating, while other mines in the commercial business get less (329), that I do not know personally, not having anything to do with the distribution of the cars to the other mines on those railroads. We figure to give them every working day cars in the total equal to their mine rating. We do that practically without exception when we are delivering assigned cars and cannot get coal that we want otherwise.

2510

By Mr. E. BALLARD (330):

As to the cars we sent for the part-output mines, their identity is preserved in accordance with car-service rules. In other words, we deliver 15 or 20 cars to the B. R. & P., and the B., R. & P., instead of using some other cars, would move those cars through to the mines that load our fuel coal, and they would simply bill them back to us. Those cars are counted in our interchange balance just as if they were commercial cars. As to whether we get what our contract calls for from these part-output mines, it so happens that those particular mines that we deliver cars to that way have generally a pretty fair car supply (331), that is, the mines on the Buffalo, Rochester & Pittsburgh. I would not say that we receive as good a supply from some of those mines as we would from the total contract mines. We have received a sufficiently good supply so that we have continued to order about 40 per cent of our coal that way. There is a maximum and minimum provision in those contracts. I did not make the contracts, and therefore cannot say intelligently just what the spread is, but I know there is a certain leeway. (332) In case of our full output contracts, the cars delivered for that traffic are counted in the interchange balance. The interchange balance at the present time does not really mean anything except as far as you are required to protect the flow of traffic. There is no rule that requires you to deliver empties in equalization. We simply do that to protect the flow of traffic.

By Commissioner AITCHISON (333):

If a road happened to be short and we have a little surplus of equipment, if we can we give them some empty cars to help them out. As to whether the following statement in the report at page 550 is sound principle, "As the coal-loading carriers commonly ship a large amount of bituminous coal they produce to points on the lines of connecting carriers, the proper balance of

2511

interchanged cars is highly important in conserving the car supply of the originating line," I believe it is. I would not say that when we turn over an assigned car it is treated as an assigned car (334) and at the same time we claim the benefit as a car given in interchange. In explanation, we connect principally, for bituminous coal, with the B., R. & P. and the B. & S. and the Pennsylvania. We do not seem to have very much trouble with the Pennsylvania cars going back. The B., R. & P. and the B. & S. are treated more or less as sort of a weak sister on car supply. We take great pains to see that those cars flow back to them in accordance with the car-service rules, but, regardless of that, at times there would be a little shortage of equipment, and during those times if we should happen to have any cars to spare and the B., R. & P. and the B & S would happen to be short of equipment, they generally ask us to help them out. We help them out whenever we can, and if those cars happen to come into the Rochester & Pittsburgh Coal & Iron Company mines to be loaded—a lot of that traffic comes over the D., L. & W., anyway—the cars could be just as well loaded with D., L. & W. fuel coal as with any other commercial coal routed via the D., L. & W. and be in accord with car-service rules. Cars are not delivered on an assigned-car basis to the B., R. & P. (335) We deliver to the Pennsylvania on the assigned-car basis. That road is the principal one receiving empties from us for total output mines. We have got six mines. As to whether if, in the course of a month, we have 2,000

2512 cars of commercial coal delivered to us by the Pennsylvania and 1,000 cars of railroad fuel coal of our own, and have turned over 1,500 assigned cars and 1,500 cars for commercial purposes, I would consider that we had equalized. We have not up to the present time had any complaint from the Pennsylvania about equalization on open cars, and therefore that question has not become very prominent.

By Mr. E. BALLARD:

As to the cars delivered to the B., R. & P. (336), those cars were delivered in an effort to help out the bituminous coal-loading carriers rather than on an equalization basis, and are not, as I construe it, assigned. My understanding is that an assigned car is only one which is delivered to a connecting line for loading at a mine where you have a total output tonnage.

By Commissioner AITCHISON (337):

I know that our connections have refused to take cars unless we had total output of certain mines, with reference particularly to the Pennsylvania Railroad. That was some time ago, back, I think, in October, 1922.

2513 (337) Concerning the statement in Mr. Ryan's letter of July 29, 1922, answer No. 4, concerning the car-shortage period in 1920, "We are protecting the loading of our fuel coal with assigned cars, with the exception of one operation, this operation being sup-

plied with equipment by the line on which it is located, and which line will not accept cars from us for the loading, at least for the present," that was before the understanding existed that an assigned car was a car sent to a mine where you had contracted that total output. (337½) That is my understanding. I can not refer you to any particular rule of the commission. I do not mean service order 18. The Pennsylvania Railroad has a blank that had to be signed by the operator and the railroad at the time I refer to on which our practice is based, and they would not accept a car for an assigned-car basis unless you had total output. I do not recall what road it was that would not take the empties as indicated in the letter. It was my understanding that the letter referred to March, 1920. (338)

By Mr. LIVERIGHT:

Our cars which go to the B., R. & P. are distributed by them in the general distribution. I would hardly say that they are free to load them to any mine they choose on their road. We give them with certain reservations, because we would rather get our own cars back off their line.

By Director BARTEL:

We give them to mines that will load back via the Lackawanna.

By Mr. LIVERIGHT:

Our coal comes back in other than our own equipment to a certain extent. To what extent I can not answer off hand. (339) Generally, if we are delivering cars, the majority of our
2514 fuel comes back in our own equipment. When there is any of our equipment that does not come back to us loaded with our own fuel, we have received some cars loaded with commercial coal.

By Director BARTEL (340):

As to whether we place any assigned cars on the B., R. & P. at all for our railway fuel at the present time or did so in 1922, "Before I answer that question I would like to know if my understanding is correct of an assigned car."

"Commissioner AITCHISON. No it is not."

"The WITNESS. * * * Yes. We have delivered cars to the B., R. & P. in 1922 on the assigned basis, and we have delivered them in 1923."

By Mr. LIVERIGHT:

I can not state what tonnage we got from the B., R. & P. in 1922 on the assigned basis. (341) It was a considerable quantity. We furnish cars to the B. & S. on the assigned basis.

"Mr. FLETCHER. Mr. Liveright and your honor, may I give the witness what I understand to be the definition of assigned cars, and ask him if he delivers to those two lines that he mentioned? * * *"

"Commissioner AITCHISON. We would be glad to have the facts, Judge Fletcher."

"Q. (By Mr. FLETCHER.) Leaving aside the output mines, and assuming that the assigned basis for partial output is the basis under which all cars which you deliver for fuel loading are to be placed at that mine, without regard to that mine's distributive share—assuming that is what is meant by 'assigned car'—— * * *."

(342) "Commissioner AITCHISON. And without any equalization subsequently? * * *"

"Q. (By Mr. FLETCHER.) Take my question as I have stated it, supplemented by that of Commissioner Aitchison, as representing the true definition of 'assigned car,' do you furnish assigned cars to the B., R. & P. and the B. & S? * * *."

2515 "A. We have delivered assigned cars to the B., R. & P. and the B. & S. on that basis."

By Commissioner AITCHISON:

We are not doing that right now (343), and were not in October, 1922. We did not deliver cars to these lines in October, 1922, for soft-coal loadings on the assigned basis, because we had all the soft coal we wanted and we were short cars for anthracite loading. As to when we began assigning cars, as Mr. Fletcher has described it, to mines on the B., R. & P., it was, as I recall, the latter part of either November or December last year.

"Commissioner AITCHISON. Now, is there any contention that the Buffalo, Rochester & Pittsburgh assigns cars for its own fuel loading on its line?"

"Mr. FLETCHER. I have not so understood."

"Commissioner AITCHISON. The questionnaire says that they were not doing it in October, 1922, and that they did not do it in 1920 during the car-shortage period, except some equipment which was generally regarded as unfit, if I have correctly summarized the language."

"Mr. FLETCHER. I assume that answer could be considered in the light of the fact that they probably refer to cars for their own fuel." (344)

By Commissioner AITCHISON:

We have no output contracts on the Buffalo, Rochester & Pittsburgh. As to whether we have any contracts which call for the output for limited periods on the B., R. & P., the answer is "yes." I don't think that our contracts with mines on the B., R. & P. are such that when they do ship they ship preferentially to us. (345) My opinion of it is this, that if we would deliver assigned cars, according to my corrected understanding, they would return those cars to us in preference to applying them on commercial

2516 orders. That is simply my understanding. As to whether they would receive more of those cars than the ratable pro-

portion based on the mine ratings, as compared with the available car supply for commercial purposes on a given day, I do not know. I am not familiar with the ratings on the B., R. & P.

By Mr. LIVERIGHT:

I do not make the contracts for fuel myself. I can only speak from what I have heard. I know that some of the contracts are not made direct. Some are made through jobbers or brokers. (346) As to whether there is assignment of a car, where we do assign cars for the D., L. & W. or the broker we bill the cars to a specific mine—not in every case. For instance, on the B. & S. and the B., R. & P. where we haven't total output, if we did deliver on an assigned car basis, the cars would be billed to the coal company; but where we take the total output, the cars would be billed to a specific mine. Where we bill to the Pennsylvania, we bill it to the specific mines. They are where we have total output and are Alden No. 1, Alden No. 2, Fairfield, La Coal, Sarah Furness, and Superior. There are two Superior mines and one or two other mines that I do not recall. (347) The Sarah Furness is owned by the Keystone Mining Company.

C. L. HINKLE (348), called as a witness and having been duly sworn, testified as follows:

Direct examination (349) by Mr. FLETCHER:

I live in Chocago and am general manager of the Chicago Great Western Railroad. (350) This railroad, operating 1,496 miles of main line, consumes daily an average of 2,300 tons of coal. This is not a coal-producing road. We have but one small mine producing two to three cars of coal per day located on our rails, and this
2517 mine is new and undeveloped with its future uncertain. The necessity of securing a dependable supply of coal is apparent. The Great Western secured a controlling interest in a coal mine in southern Illinois located on the Illinois Central Railroad in September, 1917, and since the acquisition of this mine has consumed its entire output and is now receiving about 85 per cent of its fuel requirements from this source. To secure efficiency in operation, the Great Western has constructed 21 modern mechanical coaling stations. These stations require that the coal be loaded in a specific kind of car in order that economy in operation may be obtained, and in order to effect this economy the Great Western purchased 706 hopper cars especially adapted for transporting its company coal. With the exception of the Federal control period, during which time the cars were thrown into general use and scattered throughout the country, these cars have been used exclusively in handling coal from the company's mine to our coaling stations. Prior to the acquisition of these cars and again during (351) the Federal control period, the coal for the Great Western was shipped in miscellaneous equipment, and it required a heavy expenditure for labor at coaling stations to shovel coal from cars not designed to dump it into the receiving pits.

The cost per ton for handling at our mechanical coaling stations when miscellaneous cars were used was about 21 cents, while at present by the use of our own cars we are handling it for about 6½ cents per ton. A saving of 14 cents per ton on the annual consumption means over $100,000 saved. Should the Chicago Great Western be restrained from sending to its own mine the cars it purchased to transport its fuel coal, and which cars are adapted for that use, the operation of the road would be seriously affected. It could not depend on a steady flow of coal from its own mine, as the output of that mine would be restricted to the cars placed for load-
2518 ing by the Illinois Central Railroad, nor could it contract with other coal-producing companies for any specific amount daily, for the reason that prevailing car supply at their particular mines would govern. In periods of car shortage it would undoubtedly be obliged to purchase coal on the open market at exhorbitant prices and, if such spot coal were not available, to confiscate commercial shipments in order to continue operation (352) it endeavors to keep in storage 10 to 15 days' supply of coal, having at present 35,000 tons on the ground. The cost of unloading and reloading is about 40 cents per ton. This does not include interest on the investment nor the depreciation in value of the coal so stored. If this railroad, whose financial results from operation are a matter of record with the commission, is to be deprived of the economical and efficient arrangement it has perfected for securing and handling its fuel coal, and in addition have to pay high prices for "spot" coal and for confiscated coal, or, on the other hand, to incur the heavy expense of storing a large portion of the coal consumed annually, the result will be most serious.

Cross-examination by Mr. E. BALLARD:

We bought the mine on the Illinois Central in September, 1917. (353) As to the situation with respect to fuel coal in 1920, we did not to my recollection have any difficulty in getting it, so far as a supply of coal was concerned. We were receiving our coal during the major portion of 1920 in miscellaneous cars, flat-bottom cars and cars that required shoveling, and from our mine on the Illinois Central. That there is nothing in the commission's decision or
2519 order that would prevent the use of these special cars in serving our mine is not my understanding. My understanding of the order is that if it goes into effect it would prohibit us from assigning these 706 cars to our mines on the Illinois Central rails, and my testimony is based on that understanding. As to the effect on our line if it should develop that that understanding was incorrect and that the only limitation was with respect to the volume in which those cars could be delivered from day to day to the mine, the effect on our railroad would depend very largely upon the available supply of cars on the Illinois Central (354), and it would be difficult for any one to make a guess as to what the situation would be.

By Mr. FLETCHER:

If the Illinois Central had 50 per cent car supply, that would mean about half of our cars could be used in transporting our own fuel.

By Mr. E. BALLARD:

We have enough of these cars to furnish 100 per cent supply at that mine every day and to move them from the mine to points where we unload them, through the year. (355) I do not know whether the car supply on the Illinois Central in 1920 was short or not. The coal-car supply on our line was not short. We have no mines. I do not recall that we secured our fuel in 1920 without the use of assigned cars at all. I would say that as many and as rapidly as we could begin to secure the return of our cars they were put back in the assigned service. The response to questionnaire with respect to 1920 shows that we did not assign cars to mines on our own line and did assign them to mines off our line. As to the distance from our mine to the fueling station (356), I can not answer accurately. It is about 100 miles on the Illinois Central up to the connection where they deliver us coal. Then that coal spreads over our
2520 system to the various coaling stations. As to the distance from the junction to the coaling stations, the longest haul would be to Council Bluffs, which would be about 350 miles on our line; the shortest haul would be about 20 miles.

(358) [Commissioner Aitchison read into the record the following question in answer to the questionnaire:]

"4. If your company is now following the practice of protecting the loading of your railroad fuel with assigned cars, incident to the extraordinary conditions of coal production now prevailing, state the extent to which that practice is being followed, with detailed information in line with the above."

"Answer. We are at the present time receiving no coal from contract mines, account strike, and it has been necessary to purchase coal in the western Kentucky field. (359) We are delivering at the present time some of our coal cars to connections for loading this coal, but on account of the coal coming from so many different mines, it is only practicable to furnish a limited number of system cars."

By Mr. E. BALLARD:

The capacity of our mine on the Illinois Central is about 35 to 36 cars a day, on an average, for the working days in the year that the mine is worked. I don't know whether that is just 300 or what it is. Our 706 special cars are 50-ton cars.

By Mr. BROWN:

Our road consumes about 2,300 tons per day. (360) That fluctuates; 2,300 tons a day would make about 800,000 tons per annum, if the business held up during the year. My testimony showed that this mine was only supplying about 85 per cent of our

consumption now, taking its entire output. It does not
2521 entirely supply the road. If there was a 50 per cent car supply on the Illinois Central, as I understand the commission's order, we would only get half the coal that we are getting now. (361) As to whether we could get the remainder of the coal from other mines, besides the 15 per cent we are now getting, we could if we would pay the prices and if it is available to get. I can not answer that. I have seen the time when you could not buy spot coal. Right now we could not get it cheaper than our production price. I am not competent to answer what our production cost down there is.

By Mr. ROPIEQUET (362):

Our railroad has a controlling interest in this mine. The New York Central has the remainder of the interest. The mine is operated by the Madison Coal Corporation, a subsidiary of the Illinois Central. As to whether the cars I spoke of are a special kind of equipment different from other coal cars, they are drop-bottom hopper cars, what are commonly known as battleship cars. The Illinois Central has at times supplied Illinois Central cars at our mine. The understanding with the Illinois Central is that they
2522 are not to load our coal cars with anything but our company fuel. (363) Naturally that equalizes all parties. The commercial fuel which they deliver to our line is in cars that are foreign to our lines, and they are returned as soon as they are made empty, and in that way the equalization as between the roads is kept up. I don't know whether or not the Illinois Central credited us on the balancing of the car supply with the cars which we gave them for our own fuel supply during this period. We have been getting our supply regularly during the last year and a half from this mine, with the exception of a suspension of two or three days for mine trouble and holidays and insepient strikes, etc., and during the strike period. (364) I do not know whether during that time the mines in our immediate neighborhood were not able to work because the Illinois Central's transportation facilities were insufficient to move the cars. I don't know that it was necessary to use more of the transportation facilities for our cars than they could devote to the other cars. We have never asked them to set aside their commercial business in order to handle our traffice. It is all commercial business to them. They get the full tariff rate for handing the coal.

By Mr. CURRY (365):

We store coal. At this time of year especially, we endeavor to carry 10 to 15 days' supply to take care of an emergency.

J. C. WROTON, recalled as a witness, testified further as follows:

Direct examination by Mr. FLETCHER (366):

I am with the Seaboard Air Line, and at the previous hearing last November I testified that up to that time, and for recent months, we

had not had the protection and benefit of the assigned ca
2523-2524 I tried to make plain that in consequence the road wa
getting in what we considered desperate straits for coa
Shortly subsequent to the hearing, and after mutual agreement an
arrangements with the originating roads, we were able to work ou
arrangements for getting the principal part of our fuel tonnage i
assigned cars. As a result our coal situation eased up. As of Sep
tember 1, 1922, to give general figures, we had 35 days' supply of coa
on the railroad. Through inability to get a regular dependable
supply, because of the lack of the assigned-car rule at that time, th
supply dwindled to approximately 9 days' supply the latter part o
November, 1922. About that time, and through the month of Decem
ber and subsequent thereto, we have been able to get practically
(367) an adequate supply of dependable and proper grade coa
through the use of the assigned car to a considerable extent. W
use the assigned car principally in the Alabama fields on the lines o
the St. Louis & San Francisco, the Louisville & Nashville, and th
Birmingham Belt.

Cross-examination by Mr. E. BALLARD:

I have heard the testimony of the official of the St. Louis & San
Francisco with respect to equalization later if a mine on that lin
is furnished our cars in excess of its distributive share. As to whethe
I have a different understanding of the situation, I have no informa
tion as to the rating of the mines on the Frisco and the administratio
of the assigned-car rule on that road. (368) I have not any more o
different information with respect to the other roads from which w
secure our fuel.

E. R. ROUZER, called as a witness, and having been duly sworn
testified as follows:

2525 Direct examination by Mr. WILLIAMS:

I am superintendent of transportation of the Western Mary
land Railway and am in charge of the general distribution of fue
cars. This railroad has followed the practice of assigning car
for its fuel purposes, when necessary, to mines on its line and
mines on connections reached by trackage arrangements. (370) On
October 1, 1922, in reply to this questionnaire, we stated that w
were not then using the assigned car in the month of October. I
was not necessary to use the assigned car in October. There was no
intention, in replying to this questionnaire, to give the impressio
that we did not make use of the assigned car. The assigned ca
practice was followed soon thereafter. The car shortage came along
in, I think, the first week of November, and continued up until
April.

By Director BARTEL:

We had a very slight car shortage towards the latter part of
October, possibly on our Thomas Weaver district. (371) We had

some car shortage in another part of our territory, operating under trackage rights.

By Commissioner AITCHISON:

We had a pretty severe transportation shortage in the summer of 1922. We did not assign cars during that period. We had a surplus of coal cars. We had a shortage of motive power. I would not say that we were able to place only a certain number of coal cars a day which was less than the mine ratings. The coal strike was in effect from April until August, I believe. We went off our line at that time to purchase coal. Our contract mines were down. I would not like to say that we were pretty well down as an operating proposition the latter part of the summer of 1922. We were having rioting and all that sort of thing, but we managed to
2526 operate, as the records will show. (372) In respect to the strike and its effects, we were able to handle all the traffic that originated on our line. We had some difficulty in handling traffic offered by one of our connections. In addition to handling the traffic that originated on our own line, we handled coal traffic that originated on another line in Somerset territory that was diverted to our line, an unusual route.

By Mr. WILLIAMS:

We followed the assigned car practice prior to the 1921 shortage.

By Commissioner AITCHISON:

Mr. Byers was not, to my knowledge, down here in the summer of 1922, asking relief through our bureau of service. That bureau took up the request of Mr. Byers with regard to an embargo that we had against the Pittsburgh & Lake Erie, and I recall his reply, in October, 1922. (373) Our line did not fare worse in the late summer of 1922 than any of our parallel lines and competitors.

Cross-examination by Mr. E. BALLARD:

We serve the mines from which we get our coal, the mines being either on our line or on other railroads over which we have trackage arrangements. Our fuel requirements are provided from possibly 4 or 5 mines, and they are apportioned out to each mine on the percentage of our current requirements. (374) It so happens with us that we buy all the coal all of these mines produce. They do not sell any commercial coal. We buy the entire output of all mines except one, and that mine, to the best of my knowledge, has never shipped commercially. Our contracts are usually for the coal year. (375) It has been necessary in the past to use
2527 assigned cars during car shortage. (376) It was not necessary in October, 1922. We assigned cars in November, December, and the first three or four months in 1923. We are giving the output mines the same percentage of supply now that we gave them in January. I should say that is 80 per cent. The commercial distribution now is 100 per cent; in January, not more than 50 per

cent. Our commercial distribution reached 100 percent along about May or June. When I say we give these mines assigned cars (377) I mean we give them preferential supply. I think our percentage of distribution, based on the rating in the Thomas Weaver territory, was 85 per cent in October, 1922. The 61 per cent shown in the reports of the American Car Service Division, A. R. A., for the week ended October 6, 1922, is for the system as a total.

By Mr. E. BALLARD:

The district where we had the 85 per cent covered the entire West Virginia central, our West Virginia district, that is, from Cumberland down to Wheeling. (378) All the mines from which we get our fuel coal are in that district, down near Wheeling.

By Director BARTEL:

We attempt to equalize between districts.

By Mr. E. BALLARD (379):

I should say that we serve about 160 mines. The approximate capacity of the 5 mines we buy fuel from is around 50 cars a day. The rated capacity of the 160 mines is in the neighborhood of 600 cars.

By Mr. LIVERIGHT (380):

There are commercial mines within a few miles of the total output mines from which we take our fuel supply. I have never heard that the labor supply at the commercial mines was adversely affected by reason of our mines working full time. There are very
2528 few commercial mines in that territory; I should say not over two or three in any one case within a radius of three or four miles. They are small operations, having a capacity of one or two cars.

J. W. DAVIN, (381) recalled as a witness, testified further as follows:

Direct examination by Mr. BRONSON:

I testified at a previous hearing with respect to the Chesapeake & Ohio fuel coal situation in its relation to the assigned car question. There has been a change in our method of fuel distribution. (382) I testified that the C. & O. since the fall of 1920 have not found it necessary to assign cars for company fuel, within the meaning of the Traer rule, at any mine served by the carrier, that is to say, the mines shipping commercial coal, and that since the fall of 1920 the C. & O. had taken care of its fuel coal needs at its own three mines, which furnished it about one-third of its requirements, and at 8, now 6, entire output contract mines, all of which agreed in 1920 not to ship any coal for approximately three years; and that under its practice at that time in effect, out of approximately 40,000 coal cars owned by it, it used a daily average of about 1,200 cars under load to take care of its fuel coal needs. I also

testified that we at that time were exerting every effort to reduce the number of cars used for company fuel. By revising our methods we have reduced the number of fuel cars (383) to a daily average of approximately 700 cars of coal under load. In other words, with an ownership of approximately 40,000 coal cars, which number includes new cars now being delivered and to be delivered in the near future, we have so revised and perfected our arrangement in respect to the distribution of company fuel coal as to now re-
2529 quire for our fuel coal needs 700 cars under load, or approximately 1,300 cars loaded and empty, equivalent to but 3 percent of our ownership. The 1,200 cars which I referred to in my former testimony were loaded cars and did not take into consideration empties. Our records show as follows: July, 1923, average number of loaded cars of company fuel coal on line, 1,373; (384) average daily consumption, 111 cars; August, 732 and 124, respectively; September, 706 and 131, respectively; first week in October, 658 and 135, respectively. During this period we have handled the heaviest tonnage in the history of the railroad, and we are now satisfied from experience that a maximum of 700 cars under load is a sufficient number of cars at any one time with a maximum of 600 return empties, or 1,300 cars in all, to satisfy our fuel coal needs. We made a careful study of our fuel coal situation, having become satisfied that we were holding in reserve too many cars, more than necessary for the safe and efficient operation of the line. We began by withholding cars from the mines to thereby reduce the number of cars on hand. We entirely discontinued the practice of concentrating reserves at division points from which they were rehandled to points of consumption, and established the practice of moving the loaded cars direct from the mines to the points at which the coal was to be consumed. We followed this up carefully, reducing the number of cars placed at our fuel mines until we were satisfied that the new practice would obtain us our fuel coal supply at the points at which it was needed, (385) and of the class of coal required. By this means we demonstrated the fact that a maximum of 700 loaded cars and 600 empties on the line at any time would be sufficient to take care of our fuel coal needs, and at a time, too, of maximum tonnage. This practice involved the distribution of fuel coal direct from the mines to points of consumption over about 2,500 miles of railroad handling
2530 an exceedingly heavy tonnage. I do not think it would be possible to take care of the C. & O. fuel coal needs with a maximum of 1,300 fuel cars loaded and empty on the line without the use of our cars for company fuel at our own mines and at entire ouput contract mines. Our locomotives are designed to use nut and slack coal largely, and a preferential contract providing for a specified number of cars of nut and slack is impracticable, because of the fact that to produce nut and slack a mine must at the same time produce lump and egg, and its car supply must be used not only for the railroad's nut and slack but for commercial lump and egg,

as the nut and slack would form but one-third of the production, lump and egg forming the remaining two-thirds. (386) But few operators can produce nut and slack. We must use three classes of coal, high and low volatile, run of mine, and high volatile lump and slack coal. In order to insure the proper coal at the point of consumption and in a car which is fitted to the requirements and facilities of the point of consumption, it is necessary first to know the kind of equipment that can be handled and the class of coal required at the point of consumption, and then place for loading at the mine a particular kind of car furnishing a particular class of coal. In my opinion it would be utterly impracticable to provide our various coaling stations with the necessary grades of coal in the kind of car required at the particular coaling station if we were required to obtain our coal from various mines under a percentage distribution. In any event it would greatly increase the number of cars now used for company fuel purposes. The result would be inefficient and uneconomical operation at consuming stations by reason of the fact that coal would not reach the coaling station in the kind of car best suited to the coaling station facilities,

and inefficient and uneconomical train operation, due to the
2531 fact that the grade of coal best suited to the locomotives would not be obtained. (387) In addition to the inefficient and uneconomical operation the public would suffer by being deprived of the daily use of many cars now available for commercial coal loading under our present method of distribution. In the first six months of this year, 25,148 cars were supplied our fuel coal mines. That was a period of car shortage. Had these cars been distributed along with other cars on a percentage basis, it would have increased the car supply to the commercial mines approximately 2.2 percent more cars in the six months, based upon their daily order. However, during the first six months of this year, under our former method of fuel coal distribution, we were using approximately 1,200 loaded cars for company fuel purposes, where as we are at the present time using 700 loaded cars. From July to September, during which period there was also a car shortage, had the cars placed at our fuel mines been prorated among all mines, commercial mines would have received but one percent more cars during that period. (388)

By Mr. E. BALLARD:

Those figures are for the entire line.

By Mr. BRONSON:

As to whether the practice of taking entire outputs operates to increase the cars available for commercial loading over the practice of taking partial outputs on the assigned car basis, (390) it does quite materially, for this reason: That having coal of the entire output mines as we have, but which we would not have of partial output mines, whenever we have a sufficient number of loaded cars

on hand, at this time 700, if necessary, we close down the entire output mines, either our own or the privately owned mines, for a day or two, or even a longer period, and place the cars so released at commercial mines. We have done that within the past week.

By Commissioner ATTCHISON:

2532 We have not done that before when we had 700 cars. We have had to have quite a surplus of fuel before we ever did, because we can't do it with partial output mines. As to whether it has not always been our rule when we had a surplus of cars for railroad fuel to put them in commercial distribution, (391) it has only since we had our entire output mines. Cars are not fuel cars until after they are loaded.

By Director BARTEL:

We never have set aside a certain number of cars which we confined to our own fuel. (392) They are all system cars.

By Mr. BRONSON:

We use the most convenient car. (393) If we ordinarily assign 1,300 cars at output mines and found we only needed 1,000 cars, the 300 additional cars would automatically be used for commercial loading. (395) The point I make is that in securing all our coal at entire output mines, part of which we own ourselves, whenever we get too much fuel coal on hand, or sufficient on hand, we can shut down our mines, which we could not do in the case of taking our coal at partial output mines. As to the carriers shown on page 536 of the report of the commission in the Assigned Car case as securing fuel coal on October 1, 1922, without the use of assigned cars, as I recall it, the Atlantic Coast Line, the Richmond, Fredericksburg & Potomac, and the Detroit & Mackinac had contracts for fuel coal at mines on our line. The reason they received no assigned cars in October, 1922, was because of the shop strike and on account of the condition of our power. We discontinued receiving any assigned fuel cars from foreign railroads, and did not resume this practice until our power had improved, which, as I recall it, was late in November or December. Since that date the Atlantic Coast Line and the Detroit & Mackinac have delivered us cars

2533 which we have placed at their contract mines on the assigned basis. The R., F. & P. has urged us to do the same (396) but as our rule provides that foreign railways must deliver us cars in cuts of not less than 15 cars per cut, in order to secure the assigned car privilege, and as the R., F. & P. was unable to meet these requirements, we have not assigned cars to its mine. As to other conditions which we attach at present to the receipt of foreign line fuel cars to be placed on the assigned car basis, we require the foreign line and the operator to satisfy us that they have an entire output contract for a period of not less than six months.

Cross-examination by Mr. E. BALLARD (397):

Our practice is about the same as it was when I last testified, so far as the proportion of our coal that we buy from output mines is concerned. Our three mines produce approximately 50 cars a day. We get about 65 per cent of our total consumption from output mines.

By Mr. BRONSON:

As to whether I mean that the C. & O. mines produce 35 and the entire output 65, my answer is yes.

By Mr. E. BALLARD:

We have one mine at the present time where we are taking a partial output and are handling it as we have always handled it—that is, on a pro rata car-distribution basis. (398) We are still getting our coal from the same output mines. There is a difference in the places on our lines to which we transport coal from those mines. We have made our coaling facilities at several stations better, having improved them quite a bit since last fall. The facilities are at the same locations. We do not route any coal from any particular mine to any particular point, except some smokeless coal to Newport News for our steamer "Virginia." Our new
2534 method is to avoid concentrating out fuel supply at any division point and redistribution from that point. At the present time we are billing our fuel coal direct from the fuel mines to the consuming stations. Formerly we took it to a division point and held it in the car and rebilled it. (399) The operating conditions on our line since the fall of 1922 have improved about 50 percent. I think that has helped quite a bit in respect to this new practice we have installed. We have slightly changed our policy as to storage, having 650 tons stored in bad-order cars. (400) I think it was in line with the agreement that the railway executives had up here at a meeting some time last year trying to store a little coal. (401) I could not say whether we circularize our mines or any of the mines on our line with respect to the possibility of their providing us with fuel. That is a matter for the purchasing agent to handle.

By Mr. LIVERIGHT:

Our 650 tons of storage coal is all at one point, Chicago Junction.

By Mr. CURRY:

We bill the coal from the Dorothy, Sarita, and Eunice mines to the point that needs it the most, with a view of keeping as small a supply as possible at the central points. Those mines are located near the end of a branch of the C. & O., at the end of our Coal River extension. As to whether there are other mines that could furnish the coal more conveniently at a point nearer to the consuming point, there are none that I know of in the quantity that we require. We probably could secure it if we took it from a number of mines.

By Mr. BRONSON:

Under our present methods, near the center of the line we try to retain about 1½ days' supply of coal: on the extreme ends, 5½ days' supply. It varies as the distance varies.

2535 By Director BARTEL (403):

At the present time the car supply on the C. & O. is about 82 per cent. Our percentage of car distribution for the C. & O. system as a whole for the month of September was 69.5 per cent. The first part of October it was around 75 per cent. For an average it would be 82 per cent. (404) As to whether there is no appreciable car shortage at the present time on the C. & O., we have sufficient cars to take care of the market.

By Mr. E. BALLARD (405):

We own the Dorothy, Sarita, and Eunice directly.

F. E. HARRIMAN, recalled as a witness, testified further as follows: (407)

By Mr. LIVERIGHT:

The Clearfield Bituminous Coal Corporation has about 9,000 acres in the Salt Lick field in Cambria County, south of Nant-Yglo, under lease to the Weaver interests. They have been under lease for about two years. The Cambria & Indiana Railroad will have to be extended down to Salt Lick, south of Nant-Yglo, to reach these properties. The New York Central is not interested in the Cambria & Indiana Railroad, either directly or indirectly. I am not a New York Central officer.

(411) [Mr. Paulding, in response to a request from Mr. E. Ballard, furnished the following information:] The number of mines upon the New York Central lines is 556. (412) The number of cars per day for those mines is 3,025; that is, all cars, mine ratings, and assigned cars as well. The detail is: Lines east, 157 mines, 450 cars; lines west, 74 mines, 300 cars; P. & L. E., 38 mines, 450 cars; Big Four, 65 mines, 950 cars; Ohio Central lines—that is, the Toledo & Ohio Central, Kanawha & Michigan, Kanawha & West Virginia, and Zanesville & Western—212 mines, 825 cars; and Michigan Central, 10 mines and 50 cars.

2536–2537 OCTOBER 24, 1923.

JAMES J. MOYNIHAN, (415) called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. TAYLOR:

I am supervisor of transportation of the Erie, and have direct supervision over the distribution of cars, including the coal cars. A daily report of coal cars delivered to connections for return fuel and loads received for the 24 hours ended at 6 p. m. each day comes into my office from the various divisions by telegraph each day. The results are tabulated and put on this form, a copy of which I have.

(The document referred to was offered and received in evidence as Exhibit No. R–8.) (416)

For office reasons we included on this form the two or three of the companies located on our own railroad shipping coal to us, which companies we do not control. The companies whose stock is owned by the Erie, the North Western Mining & Exchange Company, and the Blossburg Coal Company, are not shown on this form. All other mines from which the Erie is receiving fuel coal during the current coal year are shown on this statement. (417) As to the number of soft-coal mines on the several divisions of the Erie, on our Tioga division, which runs south from Elmira, New York, we have six tipple mines and four other mines, wagon mines. On the Bradford division, which runs south from Carrolton, New York, on the main line into Pennsylvania, we have 11 tipple mines and two other mines. On our Lisbon branch, which runs west from a point on our Mahoning division, Lisbon, Ohio, we have three tipple mines and one other mine, and that is all. These mines include the mines of the North Western Mining &
2538 Exchange Company and the Blossburg Coal Company. (418) The Blossburg mines are on the Tioga division. It has two tipple mines. Of the 11 tipple mines on the Bradford division, 8 are mines of the North Western Mining & Exchange Company. In sending Erie cars to foreign roads for loading with fuel coal (419) the rule is that we bill them to a specific mine. There are very few exceptions. For example, the Pittsburgh & Shawmut has our line-up, and they have advice as to what companies we get coal from, and we turn a lump number of cars over to them each day with the advice as to how they shall be distributed, and they do the distributing. That arrangement is made for operating reasons, operating convenience.

By Director BARTEL:

We tell them the coal companies to which the cars should go.

By Commissioner AITCHISON:

These companies, as a rule, have more than one mine from which they get our coal. It is true that sometimes they get coal from one mine and sometimes from another. They distribute the tonnage. (420) On the Pittsburgh & Shawmut I believe in every case we bill the cars to the sales company, the Pittsburgh & Shawmut Coal Company, which is the sales organization for the Allegheny River Mining Company. I cannot say whether the mining company owns the mines or the Pittsburgh & Shawmut Company owns them. I know they are practically one and the same thing. As to whether some of the cars we deliver to the Pittsburgh & Shawmut Coal Company are used in commercial service, we do not check individual car numbers. We usually content ourselves with checking the empties delivered against the loads received. We check that periodi-
2538a cally, and if that checks out all right we do not go beyond that to ascertain whether the coal company loaded any one or more

of these cars with commercial coal. (421) We make due allowance for the hang-overs on each end of the period of our check. We have had our troubles often. With the assigned car practice we have had our trouble in getting our cars back. We have had no trouble for the last year or two on account of the coal being so plentiful, but in times of coal shortage we have had apparent shortages which we have taken up, and it has been the subject of correspondence and negotiation and investigation. In practically all cases we have found that the coal company has made a pretty good case. They have given us fair service, although we did not follow it up to the point of tying them down to individual car numbers that might have been misused. We stuck, as a rule, to matching the number of empties delivered against the loads received. (422) We usually bunch a period of 15 days or a month in a transaction of that kind. It would be possible for the brokerage company to use part of these cars in filling urgent commercial orders they might want to fill, and then make that up for us two or three days later. I don't recall any case where we actually found that being done. As to whether I know of any steps being taken to see that that is not done, I cannot say.

By Mr. TAYLOR (423):

Referring to Exhibit R–8, the names of the full output mines, so far as the Erie fuel contract is concerned, as shown on this list, are as follows: Bruin Coal Company, on the Baltimore & Ohio; W. A. Keyes Coal Company, at Brockwayville, on our own railroad; Beadle & McCauley Coal Company, on the Pennsylvania; the Rose & McGregor Coal Company, on the Pittsburgh & Shawmut; the Sterling Coal Company, on the Lisbon branch of the Erie, which I understand is the Delmore mine referred to by Mr. Holt, at Leetonia, Ohio; (424) F. M. Kirk Coal Company, Beaver mine,
2539 Colemans; F. M. Kirk Coal Company, Westpoint, Ohio, Kirk-Dunn mines; Y. & O. Coal Company, at Barton, Ohio, on the B. & O.; and Manhattan Coal Company, located on the T. & O. C.

By Mr. E. BALLARD:

I understand that they have some arrangement with the T. & O. C. Railroad to rotate the mines. They rotate them for a shorter period than a year. The last mine is the Tobey Coal Mining Company, on the P. S. & N.

By Mr. TAYLOR:

Our figures for the last six months show that the Beaver mine shipped for that period 83 cars of commercial coal. (425) I can not explain that unless it is when we would not take their slack they were forced to find a market for it. Generally speaking, we take their full output. All of the mines on the Tioga division, for the six months' period shipped 569 cars of commercial coal, as compared with 1,782 cars of Erie fuel. On this division, Carlisle Brothers shipped two cars; B. F. Jones, one car; Marquette Coal Company, 141; Blue Star

Coal Company, 28; Bower Coal Company, 33; Blossburg Coal Company, 23; (426) Flower Run Coal Company, 28; Voiski Coal Company, 41; Morris Run Coal Company, 264; total, 561 cars of commercial coal. The Morris Run Coal Company is reached by both the Erie and the New York Central, about one-third being shipped by the Erie and two-thirds New York Central. I have similar information as to the extent of the commercial output of mines on the Bradford division. It is as follows: The Keyes Coal Company shipped one car; Frederick Coal Company, 122 cars; Coal Hill Mining Company, 10 cars; North Western Mining & Exchange Company, 150; total, 283.

2540 (427) I cannot state positively where the 150 cars of the Northwestern Mining & Exchange Company go, but I understand those are some old commercial orders that they have been shipping on. The 150 cars amount to less than one car per working day and, I think, go to Buffalo. This is decreasing as compared with past years. As to the 2 cars of commercial coal shipped by the Blossburg, I believe it is all washed fine blacksmith coal, specially prepared for blacksmith use. That is a very old market, a very old practice. The size of the sales is about constant, I believe. As to the requirement of connecting lines that assigned cars be for the full output of the mine, (428) we have that in the case of the Baltimore & Ohio, the Pennsylvania in one case, and, to the best of my knowledge and belief, it is in use on the T. & O. C. At least their dealings with us indicate that it is. It is not on the others. As to the commercial output of these little mines on the Lisbond branch for the six months from April to September, 1923, the F. M. Kirk Coal Company, Beaver mine, shipped 83 cars, and that is all. The Sterling shipped no commercial coal at all.

Cross-examination by Mr. E. BALLARD:

With respect to Mr. Holt's testimony here, with respect to the assignment of cars to part output mines on our line and foreign lines (429), I cannot state what the practice of the foreign line is. We have so very little of it on our own railroad that it is buried in the mass. As a general rule, this commercial loading of bituminous coal on the Erie Railroad, amounting in the six months ending September 30, to 5 per cent of the total, is carried along with our own loading, that is, with the fuel coal proposition, and when cars are reasonably plentiful all hands get a full car supply. When they are not,

2541 we insist upon our fuel coal on an assigned car basis. We insist upon our share from part output mines, assigning our cars for it, and usually we work it out all right with the coal company.

By Commissioner AITCHISON:

I could not say whether the connecting line gives the part output mine additional cars so that it receives more than its pro rata share, based upon the available car supply. (430) As to the part

output mines on our own line, it is not our practice to give them the advantage over a fellow who has not a fuel car order. We guard against that.

By Mr. TAYLOR:

It is correct that we insist on these mines on the Erie loading Erie fuel coal in cars assigned for that purpose up to the extent of the mine's obligation to the railroad to furnish fuel coal; and further, the few mines that we do not control by stock ownership on the Erie Railroad, that ship coal to us, do very little, comparatively no commercial business, so we do not have that problem.

By Mr. E. BALLARD:

As to whether we do not give these mines more than their pro rata share of cars but insist upon their giving us our fuel coal first, my answer is yes. (431) But I will modify that by my last statement, that due to the fact of giving us practically their entire output, that problem does not arise with us as a general rule. That is because they are not organized for sales. As to the 561 cars from the Tioga division, there are a lot of companies in that list that do not ship any Erie fuel at all. That is the total commercial loading on the Tioga division. As to a mine both selling coal to us and selling commercially, we do not give it more than its pro rata. On that particular division there is a certain coal company that ships commercially, and also ships to the Erie, and that is the
2542 Blossburg Coal Company, which we own by stock ownership, and they shipped a total of 23 cars in the six months. (432)

By Mr. TAYLOR:

If we were on a 30 per cent car supply on the Tioga division we would give the Blossburg a full car supply up to its contract with the Erie for fuel, if we had the cars, even though that would result in taking cars from the Morris Run Coal Company.

By Mr. E. BALLARD (433):

All of these companies outside of the companies we own and control (434), located on our own railroad, from which we take coal, are on a full output basis. The Beaver mine of the F. M. Kirk Coal Company, which shipped 83 cars of commercial coal in six months, is an output mine, but that 83 cars I can not explain in detail, but I am of the impression that that is slack that we could not take during times when we had our shops shut down and could not use slack coal, and in order to keep his mine going he was forced to find a market for the slack. I am not positive that it was slack. He shipped it on the basis of full car supply, which we had all during that period on our Lisbon branch, for both commercial and railroad. If we had been on a percentage basis of distribution he would not have gotten more than his pro rata.

By. Mr. TAYLOR (435):

If at any given time the Kirk Coal Company happened to be shipping any commercial coal and if we had a reduced car supply for commercial purposes, we would reduce Kirk's commercial requirement accordingly.

By Mr. E. BALLARD (436):

As to his fuel requirements, if we had the cars we would give him 100 per cent and full pro rata of commercial in addition.

2543 By Mr. BROWN:

Our commercial bituminous on our railroad is so inconsiderable that we do not set up regular car-distribution machinery to take care of it.

By Mr. CUBRY:

We rate all the mines on our line in a rough way, according to their ability to load only. We have no elaborate records, like a regular soft-coal road has. (437) As to whether we work out percentages, in times of car shortages cars are distributed as to their recent performance, ability to load, like any other loading outside of coal.

By Mr. E. BALLARD (439):

Our contract with these companies located on the Erie Railroad, outside of the companies we own and control, is substantially on a full output basis. The contract provides for the maximum and minimum by the year and covers substantially the entire output of the mine with which we make the contract, but it does not say so. (438) (440) One of these companies not controlled by us would be free to sell commercial coal on any day when we elected to take our minimum and they were able to produce more than that. In such a case we would give them enough cars to protect our order, even though it gave them more than their pro rata share, if you took railroad-fuel cars into consideration. As to their commercial shipments on such a day, we would give them the same pro rata that the other commercial shippers got.

By Mr. TAYLOR:

That point, as a rule, does not arise, because they do not ship, and do not want to ship, commercially.

2544 By Mr. TAYLOR:

I do not know of any case where it ever happened.

By Mr. E. BALLARD (441):

We contract a certain tonnage of slack, but owing to various contingencies, like the shutting up of shops on account of the shop strike and such emergencies as that, we get over-loaded with slack, and it is not very good stuff to try to store, and we tell the mines that we will suspend it for a given period. The question of whether we are permitted to do that under the contract has never arisen. The coal company usually complies with our wishes. The mine has to get rid

of that slack itself if it has no means of absorbing it into its mine run or some other such facility. If the mine wanted to keep going it would have to dispose of it in some way, which would mean commercially.

By Mr. LIVERIGHT (442):

As to the notation "Account Pattison and Bowns" on our Exhibit R-8, showing connecting line Pittsburg & Shawmut, in that case they are the company from which we buy the coal, the same as is the Pittsburg & Shawmut Coal Company. I believe that Pattison & Bowns do not own any mines on there. We make our contract for coal with them. It is my understanding that the contract runs for one coal year and, I am quite sure, is confined to those mines on the Pittsburg & Shawmut Railroad. (444) We advise the superintendent of the Pittsburg & Shawmut when the contracts are made and also advise him of any increase or decrease in the orders from time to time by telegraph. We advise him that a certain number of cars shall be delivered to the Gilbert mine and a certain number to the Mill mine and a certain number to the McGregor mine, etc., after having received such an invitation or request from the contract company which first tells us how it wants this or-
2545 der subdivided. We are governed by the wishes of the contracting company. It usually runs for weeks at a time. It is not changed from day to day or even from week to week. I do not know anything about the contract which that company has with these mines. (445) The same situation obtains with respect to the Pittsburg & Shawmut Coal Company. The mines of theirs to which we deliver cars are not indicated on here, but they have pretty big mines. They usually get our order, which amounts, I believe, to about 15 cars a day now, from one or two of their mines. They are at liberty to place those cars for our fuel loading at such mines as suits them, if the coal is satisfactory to our inspector. The coal that we get down there as a rule is pretty good coal.

By Mr. BROWN (446):

The Pattison & Bowns Company has our schedule as to the mines the cars shall go to as a rule currently, but not the Pittsburgh & Shawmut Coal Company. We do not do that with them. As to the Globe Coal Company out in Illinois, the mines from which they shall get our coal rest entirely with them.

GEORGE H. JENKINS, called as a witness and having been duly sworn, testified as follows (447):

Direct examination by Mr. FISHBACK:

I live in Montreal, Canada, and am connected with the Canadian National Railways, having been in the service for 33 years. I have been general fuel agent since March of this year. Prior to that time I was assistant to the general purchasing agent of the Grand Trunk Railway, doing the same work for the Grand Trunk as I am for

the Canadian National now, which includes the old Grand Trunk system. My duties at present cover the purchasing of all the fuel coal for the entire Canadian National system. Among other things, it includes the quantities to be bought, the prices to be paid, the making of the orders and contracts, and in a general way
2546 supervising the distribution and shipping of the coal, and (448) cooperating with our traffic department in the routing of the coal, preparation of vouchers and other details in the matter of payment, etc.

By Commissioner AITCHISON:

At the time of the original hearing the Canadian National had a line running into the United States under the name of the Duluth, Winnipeg & Pacific. It was not represented at that hearing that I know of. I do not know whether it knew about the hearing.

By Mr. FISHBACK (450):

The total mileage of the Canadian National system is about 22,600 miles. It operates from Sydney and Halifax, in Nova Scotia, westward through every Province of Canada, and reaches the Pacific Ocean at two ports, Vancouver and Prince Rupert. It also operates about 2,000 miles in the United States including the Central of Vermont Railway. There is a peculiar situation in regard to our coal supply. The distance from the Atlantic to the Pacific over our line is about 4,000 miles, in which wide territory there is no Canadian supply of coal except at the two extremes, that is, in Nova Scotia on the east and Alberta and British Columbia on the west. This leaves a vast gap of 2,000 to 3,000 miles, which includes the territory where we use the most coal, where traffic is heavy, where we hope it will be heavier in the future, and where the thickly populated parts of Canada are, which are entirely and far removed from the coal fields that we have in the Dominion of Canada. (451) Maritime fuel, that is, Nova Scotia coal is used as far west as and including Montreal; from Montreal as far west as Winnipeg we use United States coal. From Alberta westward to the Pacific Ocean we use almost entirely Alberta coal, the exception being a small quantity of coal we get from Vancouver Island for use at local ports on the Pacific. On the northern route that we take through the
2547 Rocky Mountains we use oil, but that is a small factor. I estimate that in the present coal year we will probably get from 8,000,000 to 9,000,000 tons of coal all together, of which from 35 to 40 per cent will originate at Canadian mines and the balance at United States mines, of which about 1,200,000 to 1, 400,000 tons will come from our own mines, the Rail and River Coal Company. (452) Coal for the thickly populated parts of Canada lying in this central region of Canada must originate in the United States, because there is no local supply anywhere near it. The distance from Sydney, N. S., to Toronto is about 1,200 miles and from the Alberta mines to the same point somewhere over 2,000 miles, as compared with from 200 to 300 miles from mines in the United States to Buffalo. When

these long distances are taken into consideration and the weather conditions that we have, it will be easily seen that the movement of Canadian coal into the thickly populated parts of Ontario is an absolute impossibility, and we really have no choice in the matter except to go to the United States for coal. I think this is pretty generally understood, and we are solicited almost every day, and every hour sometimes, by United States operators for our orders to Canada. (454) Our weather conditions are very bad, especially in the winter time, and these heavy weather conditions always come at the period of our heaviest traffic. When we have zero weather it is bad; if we have heavy snow it is bad; if we have high winds it is bad; but when we have all these three together for one day it is very bad; and when we have all these three together for four or five days it is a very, very bad proposition, and frequently ties us up altogether. For that reason we must have the best coal and dependable coal. As to this region of Canada lying west of Montreal, I am familiar with that and I know that practically all the bituminous coal used in the thickly-populated parts of Ontario comes
2548 from the United States mines. (455) On account of the geographical and other conditions a great deal of the coal that we use has to come from the United States, and in view of the Canadian National Railway situation we have felt it not only desirable but necessary to protect the larger part of our requirements in that territory by acquiring our own mines in the United States and cars to move the coal from those mines to Canada. Those mines are operated by the Rail and River Coal Company and are located in Belmont County, southeastern Ohio, producing Pittsburgh No. 8 seam coal. There are 2 mines there, one on the Pennsylvania and one on the Baltimore & Ohio. A fair average output would be around 6,000 tons daily, and the maximum production was 1,700,000 tons in 1921 and a maximum of about 850,000 tons in 1920. The latter unfavorable condition was due to the switchmen's strike, etc., in 1920.

2549 (456) The production at our own Rail and River mines in 1923 will be somewhere around 1,400,000 tons in the present coal year, or approximately 50 per cent of the total requirements from United States mines, based upon Grand Trunk needs before absorption into the Canadian National, or almost 20 per cent of the entire Canadian National Railways' supply. We are now carrying on some development work at the Rail and River mines, at a cost of probably $350,000, with a view of increasing the daily production by thirty 50-ton cars, or, say, 400,000 tons a year, to be available around the middle of next December. Our management is contemplating some further development, probably to the extent of expending $1,500,000 in bringing the production up to another 1,000,000 tons in three years. The production of the Rail and River mines in 1921 was 1,700,000 tons. (457) The coal from the Rail and River mines is of a quality to meet our requirements.

In purchasing those mines, quality, of course, would naturally be the first consideration, because if the quality was not right nothing else would be right; we found, before the purchase was made, that the quality there was all right to cover our fuel requirements. Before everything was finally concluded, among other things there had to be considered, for example, the suitability of the coal for our use; its ability to stand storage, which is a very important thing in Canada; its uniformity to permit a fireman to get the best efficiency from it; and the certainty of supply; (458) also the large quantity available—that is, 150,000,000 tons or more. Then, I might give the economy in cost due to our taking the entire output, and the mines having a permanent customer who owns the necessary cars to move the coal. Another very important point was the
2550 question of elasticity of distribution—that is, we did not want to tie ourselves down to any one operation where there was only one outlet, so we decided, among others, on the Rail and River mines because we had then official rates both to Buffalo and to Detroit and also to the Lake Erie ports for movement up the Lakes. The location of the mines was a specially convenient one for supplying the needs in the different directions in Canada. As to cost of production at the Rail and River mines, as compared with costs generally, I have taken out some figures covering a period of large tonnage shipped from 1917 to 1921—five years—covering, I think, about five and one-half million tons in all. I have priced that coal out at our (459) cost of production at the Rail and River mines, and the same quality at the prices that we would likely have had to pay other operators under contract in the same district, based upon actual knowledge of the prevailing figures at the same time. For at least a part of that time I made the comparison with the United States Fuel Administration's figures that were in effect by them.

By Commissioner AITCHISON:

The result showed a difference of about $3,500,000 in favor of our costs for the period from 1917 to 1921 on five and one-half million tons of coal.

By Mr. BROWN:

We did not set the spot price off against what our contract price was. If I had used the spot prices, probably the result would have been very much larger. I used the going contract prices in the five-year period; also the United States Fuel Administration's prices which were in effect for part of that time. If I had used the spot prices, it might be as high as $6,000,000.

2551 By Commissioner AITCHISON:

(460) During this period of five years we had assigned cars all the time. I think some of these hopper bottom steel cars were bought prior to the acquisition of this property or thereabouts. 1912 is when the mines were bought.

By Mr. FISHBACK:

The purchase of those cars was brought about because of the desire (461) to make more certain the supply of our coal in Canada. Or, because of difficulties we have had in getting coal from the United States in cars of American lines. That was frequently discussed at that time. (462) These steel hopper bottom cars are used to a large extent in supplying cars to the Rail and River mines at all times, in times of free coal as well as in times of shortage; and we have found it a necessary thing in getting our coal. These cars are recognized by United States railroads, which serve the mines as cars furnished and to be used solely in moving our coal from the mines back to Canada. I understand that it has always been recognized and treated as cars assigned or consigned to the mines where we get our coal.

By Commissioner AITCHISON:

I think that was done during the Railroad Administration—that is, our cars were turned over and loaded with our coal and came back with our coal. (464) My understanding of an assigned car is that when a number on any day is below the quota for that day our cars will be placed for our coal and the initial line will furnish other cars to bring the total for them combined, up to the day's quota.

By Mr. FISHBACK:

In the case of a mine in which we take the entire output we
2552 can assign those car to that mine to the extent of our needs; and the Rail and River mines are entire output mines.

By Commissioner AITCHISON (468):

As to whether during the period of Federal control, and after C. S. 31 was made effective on October 10, 1918, down to the end of Federal control our cars were treated as assigned, I do not know.

By Mr. FISHBACK:

Coal purchased or mined by us goes from the United States mines in Ohio to the head of the Lakes—that is, to Fort William and Port Arthur—and moves by rail up to Lake Erie ports and thence by lake movement to Fort William and Port Arthur for use in western Ontario and Manitoba. Considerable quantities go that way and we even furnish 350 to 400 cars to the Baltimore & Ohio for entire use on their rails between the mines in Ohio and Lake Erie ports to insure getting coal moved up to the Lake Erie ports for trans-shipment by water to Fort William and Port Arthur. Those cars are kept in that movement on the lines of the B. & O. and they utilize them for movement of ore back from the Lake Erie ports over their lines to points in the vicinity of the mines from which our coal is taken, going to the head of the lakes. So we are doing considerable to relieve the United States lines even where the rail movement is confined to their own lines. (469) Our mines are operated for our own requirements only. We sell no coal commer-

cially and for that reason we do not compete with other operators. What we are doing in sending our own cars is a material benefit to the mines in the same districts where we obtain our fuel, a benefit to the company in the matter of efficiency and economy of operation, and of great benefit to the public. It is a benefit to all concerned and harmful to none. Coal from our mines releases a corresponding quantity for other customers from other mines in Ohio. Our cars also relieve United States equipment for other mines. The saving in cost of transporting and uniformity in quality means a large saving to us, and what the railways save is a matter of public benefit in which all share.

2553 By Commissioner AITCHISON:

As to whether, in connection with my statement that our cars released cars that otherwise would have to be furnished by the American carriers, I have made any study showing the weighted average or typical lengths of haul within and without the United States, the number of cars customarily applied and used in such service, and the number furnished by American carriers and furnished by our lines, I haven't got that information. (470) I have not made such a study. As to whether we are furnishing more than our fair share considering all those facts, I do not know. As to whether normally our lines haul from six to eight thousand more American coal cars north of the boundary than there are Canadian cars south, I do not know. I do not know anything about what the balance is.

By Mr. FISHBACK:

(472) With regard to our rail and river coal mines from which we take the entire output and to which we have had the right in the past to send our own cars off the Canadian National and Grand Trunk and have full use of them without restriction, I think if we were deprived of that right the first thing would be to reduce the supply of cars that we send to the United States and reduce the output, and correspondingly increase the price paid for our own fuel. To offset reduced production we would have to place orders elsewhere, probably at higher prices. (474) The question of storage coal by the Canadian National Railway has always been a very important one. We always try to hold sixty or ninety or one hundred days ahead at all times, with a larger percentage at the ports where we get coal in by water, to last the entire winter. In such cases, we may have five or six months' supply. At the present time we have got ninety or one hundred days' supply at all points and
2554 we feel that we have pretty well already gone the limit. (475)

We have bought more coal, have tied up more money in coal, than we would ordinarily like to do, but we have done it particularly for the reason that coal has been reasonably plentiful last summer and moderate in price, and there may be some mine trouble next Spring;

o we took advantage of the opportunity and put in a good ninety lays' supply and probably a little more. Storage of coal is, of ourse, very much more expensive than delivery of coal to loco- notives through chutes at loading stations. I would say that the ost of storing coal, including extra switching, unloading, insurance, entilation, and interest, etc., might be anywhere from 75 cents to $1.00 a ton, based on coal in stock, including deterioration in quality, whereas coal furnished direct from the mines all the year round and delivered direct from the cars through chutes to the engines would probably be six or seven cents a ton and would be better quality at that because it would not be broken up in handling. There is some deterioration in handling the coal in its efficiency. (476) Our annual coal bill is the biggest material item we have in our operat- ing costs. I think for the present coal year our purchases would probably run somewhere around $50,000,000 in all, and the magni- tude is causing our management a great deal of concern. We feel we ought to bring it down and are disturbed and alarmed at any change in the car situation that may almost certainly add to the fuel cost and make an almost intolerable expense even worse than it is.

By Commissioner AITCHISON:

The 2,500,000 tons used annually, referred to in the Commission's report, were used by the old Grand Trunk. My testimony now covers a lot of mines that were not in before. The $50,000,000 I mentioned covers our purchases of coal, which will include a little stock coal. (477) The three and one-half million dollars ex-
2555 cess cost, I testified to, was over a period of five years and was with respect to the Grand Trunk. That is about $700,000 a year.

Mr. FISHBACK. That was the Rail and River mine coal.

By Commissioner AITCHISON:

The statement in the report that the Grand Trunk used about 2,500,000 tons was correct a year ago. Since then our consumption has increased a great deal. I think for the five-year period our con- sumption would be higher. We use a little more. As to whether the value of this privilege was about 30 cents a ton, the answer is "yes," on that basis. (478)

By Mr. FISHBACK:

In the aggregate, that is a considerable sum even upon that basis and an item of very high importance in view of the financial condi- tion of our property. I have knowledge of what it means to be compelled at times to go into the open market. On several occasions we have had to go in the open market for coal, and this is one of the reasons why we are concerned in getting the very largest and most dependable supply that we can from our Rail and River mines, as anything we are short from the output there we are almost certain

to have to go out and buy from other operations and pay a higher price and probably get inferior coal. We have paid in the past as high as $8.00 or more, in 1920 and 1922, for open market coal. There is no assurance that this situation may not occur again. An additional special reason why the Canadian National should have high grade coal and a very important reason is (479) that all of the coal going up from the United States to Canada carries very heavy freight rates, and we also have to pay the duty on it, exchange,
2556 etc. That duty and exchange are included in the estimate that I gave. That is the delivered price to our rails. In view of that, and of the fact that the freight and duty is the same on high quality coal as it is on low quality coal, it will be easily understood why we must have good coal. Otherwise, we will be paying high transportation expense for an inferior article. It would reduce our earnings by engine failures, slowing up movement of freight, etc.

No coal should be confiscated except for very imperative reasons and only in such cases where the situation cannot be met in other ways. If there should be any change in the present method of drawing large quantities from our mines and thus interfering with our regular supply, as a result of which we may be out of coal, or not get enough of it, and under circumstances of that sort, the only course would be to confiscate coal enroute (480). We would not want to do this except in case of a real emergency as the practice always brings undesirable complications, not only in regard to unsuitable coal and possibly paying higher prices for it, but we would also antagonize commercial patrons on our lines and run the risk of damage claims arising out of replacement losses or losses due to plants closing down for want of coal. This is not an imaginary situation. It shows what might happen if we are unable to get the quantity of coal that we expect to get from our Rail and River mines. As to whether distributing our purchases over a wide field in times of emergency results in waste in the use of cars and waste of transportation or increased cost, my answer is "Yes." As one case in point, I remember in the summer of 1920, when coal was scarce, we moved several hundred cars from southern Illinois through Chicago and Detroit as far east as Toronto, thus involving a very long haul. The price was high, and the quality was inferior to our Pittsburgh No. 8 coal, and while those cars were on the way up to our consuming points, they were that extra length of time
2557 out of service in the regular way. (481) I understand that in times when railroads are forced into the open market to get coal the prices we are apt to pay are the higher prices also paid by the public at the same time. I do not see how there can be two sets of prices, one for the railroad buyer and one for the public buyer. I think that if we were deprived of the right to use our cars to the mines in preferential loading to the mines, which we own, getting a supply from other mines in our own cars, would force us into the

open market for our coal. When we have to buy spot coal in emergency conditions, it is frequently not possible to inspect it as thoroughly as we do in our ordinary purchases. On some occasions we have no opportunity to inspect it all all. Under those conditions at times we have obtained coal of very inferior quality that has resulted in poor operation of our engines. In the fall of 1922, I recall that we were forced to buy coal of that quality and we had many serious complaints (482) from our operating department giving a large number of delays and of engine failures.

Cross-examination by Mr. E. BALLARD:

By "open market" I mean the spot market, "I mean some special occasion that has to be taken, apart from our contracts." I do not include in that term annual contracts. As to whether we buy a large amount of American coal from outside mines, which, as far as those mines are concerned, is commercial coal which moves to Lake Erie ports and thence to us by water, my answer is "yes." That coal is not moved in assigned cars at all, and there is no obligation under our contracts to furnish assigned cars, that I
2558 know of. In speaking of going into the open market (483), I was referring particularly to our all-rail situation although it might apply to both. As to how much coal we get via lake that way, it varies from year to year. For the year 1923 it would not be less than a million tons. I do not think it has run over a million tons during recent years. I haven't got the exact figures for the old Canadian National. It would never run as high as that on the Grand Trunk. As to the 23,000-mile system that I have described I think that a million tons probably would be about the average.

I have made comparison between the cost of coal we got via lake and the cost of coal we got from the Rail and River mines. That differs from the comparison I gave in my direct testimony. (484) As to the production of coal in Nova Scotia, I estimate the total production to be 6,000,000 tons. Besides our railroad there are other railroads in Canada, for example, the Canadian Pacific. I do not know how much coal they take or what their mileage is. Of the 6,000,000 tons purchased in Nova Scotia we can probably take anywhere between a million and one-half to two million tons. (485) I think in every case we take that for mines that we serve with our railroad. I do not know whether we transported any commercial coal from those other mines on our line. I do not know anything about the system of car distribution that we have in effect there. There has not to my knowledge been any necessity for assigning cars there. I do not know whether there is a full car supply there most of the time. (486) I do not know what the effect would be on the car supply in the American districts where we get our coal, if all the coal cars bound for Canada were stopped at the international frontier so that the Canadian lines had to furnish their own cars for their part of the haul, and if at the same time we

withdrew our special fuel cars from that service. I do not
2559 know anything about the distribution of cars in Alberta or Vancouver. The percentage of our total fuel we got from Nova Scotia, Alberta, and Vancouver, I think, is 35 or 40 per cent. Of the remaining 60 or 65 per cent that we would get in this country we get about 90 cars a day from our mines or about 120,000 tons a month. The proportion of the 60 or 65 per cent that this represents is 30 per cent. (487) The remaining 70 per cent of the total fuel consumption which comes from this country we get partly under annual contract and partly under short-term purchases. Some moves all-rail and some via lake. We use our special cars partly for some of our contracts other than with our own lines. In the case of one contract we furnish a portion of the equipment. There are only four contracts altogether now in which the supply of our cars is involved. One is our own mine and three others where we help out. We have five or six other contracts in this country besides those. (488) The portion of our fuel coal that is contracted in the manner I have been testifying about, by sending in these cars, preserving their identity, and setting them to the extent of the mine's capacity per day, is a very small part of our whole fuel consumption.

By Mr. FISHBACK:

I am figuring this on our United States contracts only.

By Mr. E. BALLARD:

(489) As to solicitation from American coal sales agents, that has nearly always been on the telephone, and from long distant points. Sometimes we got inquiries a dozen times a day from different companies. We got them from all fields within our reach on our line. As to expansion of the Rail and River mines since Mr. Bowker testified, it is being carried on now. If the work goes forward the capacity at the end of three years will be practically double the capacity Mr. Bowker testified to. (490) I do not know whether that
2560 will result in the development of all the coal lands that we own in connection with the Rail and River operations. As to why abolishing this privilege would result in our sending fewer cars to the United States, it might be the policy for us to elect to withhold those cars. I think that would be the only way that that result could come about.

By Mr. FISHBACK:

We would restrict those cars because of the fact that we could not know whether we would get them back or not, in shortage of coal cars in the United States. (491)

By Commissioner AITCHISON:

As to why under the order of the commission now being held up, I think we would not get our cars back, I was under the impression that they would not of necessity go to the points intended for loading with our coal and come back again. They might go somewhere else.

By Mr. FISHBACK:

As to whether we would be limited in the number, we would have right to place according to the mine loading for the particular day, my answer is "yes."

By Commissioner AITCHISON:

They might not over a period accept so many of our cars, but if they did not accept them we would have them, so that we would not be deprived of them. (492) Referring to the statement in the commission's report at page 540, concerning the old Grand Trunk, (495) there is nothing, as far as I can see, in the statement of facts of the position of the Grand Trunk, contained in that report.

2561 (496) Q. (By Mr. BROWN.) Well now, why should not the Canadian railroads be put on the same basis as other commercial users of coal in the United States, in times of car shortage? A. No answer.

By Mr. LIVERIGHT:

None of our cars are assigned on short term contracts now. We have no output contracts on the B., R. & P. We furnish cars regularly to them, however. We turn the cars over in bulk to the B., R. & P. and they distribute them to the different operations. That is to say, we deal with the Rochester and Pittsburgh Coal & Iron Company. I do not know whether it distributes cars to suit itself. I do not know how the cars are distributed. I do not know that it is not a producer of coal. I do not know how many mines our cars are distributed to. Those contracts are not for short terms. (498) The average distance from our mines to the point of arrival of the cars in Canada may average 300 miles. From that point it would not be likely to travel as much as 200 miles farther to the points of unloading. I have not checked how far it would be. I do not know how many trips per year we get out of each of our cars assigned to our mines in Ohio. (499) I think our line has bought probably about 500 cars since last year.

By Mr. FISHBACK:

(500) As to whether it is not highly necessary that a common carrier should have coal in order to be able to serve the public, my answer is "yes."

2562 By Commissioner AITCHISON:

I am unable to answer whether I would apply that principle, for instance, in the event there is a coal strike which ties up the coal mines in Great Britain and the British carriers come over here and request the assignment of cars, I am unable to answer.

F. B. PRICE, called as a witness and having been duly sworn, testified as follows:

By Commissioner AITCHISON:

At the present time I am chief of car service of the Canadian National Railways. I am generally familiar with the facts as to

the ownership, location, etc., of the equipment of that company. (502) As to whether customarily, with respect to open top equipment suitable for the transportation of coal, the Canadian lines are debtors to the United States lines—they are a debtor at the present time for the reason that the coal roads built cars to suit the traffic and the Canadian roads did not. The coal moves from the American coal roads to the Canadian territory. We have not equipped ourselves with coal cars for handling coal commercially. We are increasing our coal car equipment yearly. We have increased it to the extent of 300 cars this year, and (503) the budget for 1924 will, no doubt, contain an increased number of cars with the object of getting into the commercial coal proposition deeper and of helping the United States railroads to take care of the commercial coal coming into Canada. It is a recognized principle, according to my experience, that the railroads interested in the haul of traffic should supply their proportion of the cars necessary to handle it,

2563 but as I said before, we have not been invited, that I am aware of, to any extent to supply coal cars for commercial coal originating in the United States, for the reason that the United States roads have, as we understand it, furnished themselves with cars for that purpose and prefer to use them. We have sufficient equipment to handle commercial coal in Canada. (504) Based on the mileage performance, possibly three-fourths of the mileage, with respect to the transportion of commercial coal to Canada, is in the United States and one-fourth in Canada. A study was made of that some years ago to my knowledge, and it was found that that was about the approximate distance of traffic interchanged between the two countries. There has been no change in that, that I am aware of. (505) Quite customarily we have from 40 to 60 per cent in excess of our ownership on our own lines of open top equipment for the reason we have not provided ourselves with that class of equipment. The reverse of this is true with respect to box cars. On the first of April last, there were 35,000 more Canadian owned cars in the United States than there were United States owned cars in Canada.

2564 (506) At the present time it is on the basis of about 10,000 in our favor. I think if you will go back to the first of April, you will find the balance is 35,000 in our favor. I am speaking of the general figures of all Canadian railroads as compared with all United States railroads. I do not want my 10,000 figure to stand as to the Canadian National, which was approximately 5,000 [in our favor] out of our total [ownership] of 80,000. As to whether when this box car average gets against us we come over here and "hop on the tail of the American railroads pretty hard," (507) we do, because you are interested in the traffic three-quarters to our one-quarter. We like to give you the business and we want the cars back to give it to you. We want them back in Canada to supply at the originating points of that traffic for you

country. We also try to get as many American cars over there as we can, to offset the balance. We would like to make it equal between the two countries, if we can. When the traffic is heavy and we are short of cars, our cars are over here, we naturally appeal to the United States roads to protect the traffic in which they are interested just as much as we are. I think the figures showing that the consumption of bituminous coal by railroads in the United States is something less than 30 per cent might be taken as a fair average in Canada as well. I think figures showing that on October 1, 1923, the ownership of gondola coal and coke cars on the Canadian National was 14,738 are approximately correct. Of those, approximately 5,456 were purchased for the sole purpose of providing the Grand Trunk line with coal. Besides those particular 5,000 cars, we have other cars in the Canadian coal business. That equipment is chiefly of the flat-bottom type, side-dump type, which we use at Canadian mines. We use that equipment for railroad fuel purposes, but no certain quantity is set aside particularly for that purpose.

2565 (509) We have no assigned car principle in Canada. We have not found any necessity for it up to the present time. We get our fuel regularly. The cars are distributed to the mines. In times of car shortage it is understood that the railroad fuel takes preference. That is a matter of arrangements between us and the mines. We have no ratable use of our coal equipment in Canada. We supply on the demand of the mine for car equipment for outward loading. We do not usually have car shortages. The rail hauls are short. We handle the cars promptly and get them back quickly, being under our own control, and there is no delay in moving them. (510) It is possible that we will not have car shortages in Canada and you will have them in this country. As to whether at such times we are heavy debtors to the United States on open-top equipment, those cars are a class that your roads will not take from us for handling coal. They will not take the flat-bottom coal car of a certain type at all. Aside from the cars of the Grand Trunk acquired for railroad fuel business, probably 50 per cent of the remaining equipment of the Canadian National System is used for railroad purposes. (511) In order to supply 30 per cent of the bituminous coal used in Canada to the railroads, we are using more than 11,000 out of 14,700 cars, but you must consider the type of car that I referred to. They are the old class, not suitable for first-class railroads to handle. As to whether these 5,456 cars are not the "best of the bunch," they are. The flat bottom are the poor type of cars. They are in the 4,650 available to supply 70 per cent for commercial use. (512) Our claim to have these cars assigned on American railways is one of privilege—that is, simply the privilege of assigning them to our own mines to handle our own coal for our own railroads. We

2566 ask it for our own mines only, and do not ask it for our contract mines on the Illinois Central. (513) We simply

asked that the privilege apply to the Rail and River mines, which we own and which contain the quality of coal that we want and to which we are prepared to send our own cars for our own fuel purposes. We ask that we be permitted to work our own mines to the limit, and possibly we will develop to a greater extent to take more coal from our own mines in the future. In that event we would be prepared to put in more cars. (514) I have nothing I can furnish as to the adequacy of the amount of open-top equipment which the Canadian lines furnish for the joint movement from points in the United States to Canada. The fact that the Canadian line is a heavy debtor to the American lines continues to be true, but I think you should take into consideration and offset that other class of cars dealing with that figure. The grain user ought to be lined up in order to correct this coal-car situation.

By Mr. FISHBACK:

As to whether we have shortages of cars in Canada, the demand fluctuates. We have a surplus to-day. Next month there might be a temporary shortage which we would overcome. As to whether, at times when there are shortages and there are an insufficient number of cars to supply cars for commercial loading and for railway fuel loading, we send our own cars to the mines to be loaded by us preferentially, the answer is "yes." As to whether that is equivalent to the matter of assigning cars to the mines, my answer is also "yes." (515) It is undoubtedly a fact that carriers generally undertake to provide larger shares of equipment for the traffic which originates on their lines.

Cross-examination by Mr. E. BALLARD:

As to what I meant by saying in answer to Mr. Fishback's question that our practice in Canada was equivalent to assigning
2567 cars, I meant it was equivalent, because the mines give preferential treatment to fuel coal on our request when the need is apparent. Generally speaking, we have full car supply at our Canadian mines. When that supply falls substantially below 100 per cent the mines prefer our supply. (516) If we assume that all coal cars destined from points in the United States to points in Canada were stopped at the international frontier and the load transferred to Canadian cars and that our special company fuel cars were withdrawn from the United States, I think that would increase the supply in the United States.

Mr. ERNEST BALLARD. Mr. Fishback, may I ask you whether you intended to be bound by the witness's statement as to what his position is in this case, or do you still stand on your petition?

Mr. FISHBACK. Why, I am standing on my petition and on the testimony in this case, both.

Mr. ERNEST BALLARD. The reason I ask that is that in paragraph 9 you refer to the use of these Grand Trunk cars at its own mines and at other mines with which it contracts for fuel in the United

States. That is still your position, that he should be permitted to do that? (517)

Mr. FISHBACK. Yes, sir; that is my position.

H. B. RUST, (525) called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. GUTHEIM:

I represent here the Seaboard By-Product Coke Company, the Chicago By-Product Coke Company, and the Pittsburgh By-Product Coke Company. I am president of those three companies. The Seaboard By-Product Coke Company is incorporated under the laws of New Jersey. It has a plant at Kearny, New Jersey, on the
2568 Hackensack River, of 165 by-product coke ovens with by-product recovery apparatus. It is under contract to furnish its entire output of gas to the Public Service Gas Company of New Jersey. We are obligated to furnish them daily about 25,000,000 cubic feet of gas of a specification to meet the public service commission's specification of the State of New Jersey. We also sell coke to public utilities in that district, including the Public Service Gas Company. Our contract for gas is a long-time contract, and we are held very close as to quantity and quality. (526) The plant was built in the first instance principally for the purpose of supplying that gas. That was the only contract we had at the time we went into the building of the plant. We had to furnish coke to meet the local market conditions as they arose. As to our production of coke there, we carbonize about 1,000,000 tons of coal per annum, and produce, roughly, 750,000 tons of coke and about 9,000,000,000 cubic feet of gas per annum. There is no requirement by the authorities of the State of New Jersey with respect to the quality of the coke, but there is with respect to the 9,000,000,000 cubic feet of gas.

The Chicago By-Product Coke Company operates a plant in the city of Chicago of 105 by-product coke ovens, with complete by-product recovery apparatus, and also owns and operates a water gas plant with a capacity of about 30,000,000 cubic feet of gas per day. All of the gas and approximately half of the coke are sold under long-term contracts to the People's Gas Company of Chicago. (527) The gas is required to meet the specifications of the Public Service Commission of Illinois. All of the coke that the gas company gets from us is used in the manufacture of water gas in their water-gas plant. Approximately 750,000 tons of coal is car-
2569 bonized at our plant there per annum. We produce about 500,000 to 550,000 tons of coke, and we give them about 6,000,000,000 cubic feet of coal gas and about 10,000,000,000 cubic feet of water gas.

The Pittsburgh By-Product Coke Company operated seven toluol plants during the war to furnish totuol for the making of T. N. T., and since then it has not operated any plant at all. It owns the equitable title in 1,000 freight cars, coal cars, of which it leases 350

to the Seaboard By-Product Coke Company, and 650 to the Chicago By-Product Coke Company. (528) I am president of Minnesota By-Product Coke Company, which operates 65 by-product coke ovens and a complete by-product recovery plant at St. Paul, Minnesota. That plant uses about 360,000 tons of coal per annum, makes about 250,000 tons of coke, and sells about 2,000,000,000 cubic feet of gas per annum to the gas company of St. Paul. It produces about 90 per cent of the domestic gas distributed to the public by the St. Paul Gas Company. The company has lost money ever since we built it, except for about six months during the war period.

I am president of Koppers Company. It is an engineering and contracting company that has built the coke ovens that produce probably between 80 and 90 per cent of the by-products coke made in this country. In that connection we are compelled to make studies, including financial studies, of many of the plants and the locations where we build plants, (529) and we have to become very familiar with our customers' business so far as the coke supply is concerned.

I am familiar with the plant and the operation of the Rainey-Wood Coke Company. We built that plant. It has 110 ovens, with by-product recovery apparatus, and uses approximately 800,000 tons of coal per annum and makes 550,000 tons of coke. It produces about 8,000,000,000 cubic feet of gas per year, about 20,000,000 [pounds] of sulphate of ammonia, and about 8,000,000 gallons of tar—2,000,000 gallons of benzol, used now principally as motor fuel.

The Rainey-Wood plant is under a long-term contract to sell
2570 gas to the Counties Gas & Electric Company, which in turn distributes its gas as domestic fuel in Norristown, Conshohocken, and other cities in that district.

Q. (By Mr. GUTHEIM.) Is that what is usually called the main line and the Schuylkill Valley district?

A. The main line and Schuylkill division.

That is in suburban Philadelphia. (530) That company is under obligation to distribute a fixed amount of gas, and it has to meet the specifications of the Public Service [Commission] of the State of Pennsylvania. The Rainey-Wood Coke Company sells a substantial portion of its coke for water-gas manufacture, and has to meet the requirements of the trade in competition with other fuels. That coke is used in Philadelphia, Reading, Pottstown, Allentown, and other municipalities in that district, in the manufacture of water gas.

I am also familiar with the operations of the by-product plant of the Donner-Union Coke Corporation, at Buffalo. At the request of the Government in 1918 we made a study of the situation at Buffalo, and were (531) subcontractors in building a plant which the Government paid for at that point. That plant consists of 150 ovens with complete by-product recovery apparatus, and uses approximately 1,000,000 tons of coal per annum, and produces roughly 750,000 tons of coke, about 25,000,000 pounds of sulphate of ammonia, 9,000,000 gallons of tar, and about 6,000,000,000 cubic feet of gas.

They sell their gas to the Iroquois Gas Company, and it is distributed mixed with natural gas as domestic fuel, and is required to meet the specifications under which it is sold.

The Rainey-Wood Company owns 400 standard 70-ton hopper-bottom cars. The Donner-Union owns 500 cars, I think, of the same capacity. I am quite familiar with the petition for rehearing filed before this commission by the companies that I have mentioned, and it correctly sets forth the situation with respect to these particular plants.

2571 (533) (Paragraph 1, 3, and subparagraphs 2, 3, and 4, of paragraph 4 of the petition, were thereupon offered in evidence by Mr. Gutheim, and were incorporated into the record without having the witness read them. This was done over objection by Mr. Liveright to the admission of the subparagraphs of paragraph 4. The portions of the petition referred to are as follows:)

"Seaboard By-Product Coke Company is a corporation organized and existing under the laws of the State of New Jersey, with corporate office in the city of Newark, New Jersey, and owns and operates by-product coke ovens located at Kearny, New Jersey, near the city of Jersey City, in said State. Its plant consists of 165 Koppers ovens having a normal daily consumption of 3,000 tons of bituminous coal, by-product recovery apparatus in connection therewith; producer has plant and blue-gas plant.

"Chicago By-Product Coke Company is a corporation organized and existing under the laws of the State of Delaware, with corporate office in the city of Wilmington, Delaware, and owns and operates by-product coke ovens located at Chicago, Illinois. Its plant consists of 105 Koppers ovens having a normal daily consumption of 2,200 tons of bituminous coal, by-product recovery apparatus in connection therewith, and a modern water-gas plant which uses a large portion of the coke produced.

"Donner-Union Coke Corporation is a corporation organized and existing under the laws of the State of New York, with corporate office in the city of Buffalo, New York, and owns and operates by-product coke ovens located at Buffalo, New York. Its plant consists of 150 ovens having a normal daily consumption of 2,800 tons of bituminous coal and by-product recovery apparatus in connection therewith.

2572 (535) "Rainey-Wood Coke Company is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, with corporate office in the city of New York, New York, and owns and operates by-product coke ovens located at Swedeland, Pennsylvania, near Philadelphia. Its plant consists of 110 ovens having a normal daily consumption of 2,250 tons of bituminous coal and by-product recovery apparatus in connection therewith.

"Seaboard By-Product Coke Company supplies gas made in its coke ovens to the Public Service Gas Company, a public utility of the State of New Jersey, supplying gas to the public in the cities of Newark, New Jersey, Paterson, Hoboken, and other cities, boroughs, and districts in the northern part of New Jersey, and it is under obligation to provide gas for said public purposes to the extent of an average of 25,000,000 cubic feet per day. The quantity, quality, and British thermal unit content of the gas so furnished must be constant to comply with the rules and regulations of the Board of Public Utility Commissioners of the State of New Jersey. All of the gas so furnished is distributed to the public as aforesaid under the obligations of Public Service Gas Company, imposed by its franchises and the regulatory statutes of the State of New Jersey. The Public Service Gas Company is dependent at all times upon the gas received from petitioner to enable it to meet and perform its said obligations and to maintain adequate and sufficient public service.

"In addition, Seaboard By-Product Coke Company produces approximately 665,000 tons of coke per annum, the quality of which must be satisfactory to meet the requirements of Public Service Gas Company and other public utility companies in and about New York for gas making purposes. Approximately 60% of the coke
2573 produced is sold to public (536) utilty companies for the manufacture of water gas for distribution to the public in New York, Brooklyn, and New Jersey. Of the balance, approximately 30% is sold for domestic purposes and approximately 10% is sold for industrial use. All coke sold, excepting that sold for industrial purposes, must compete with anthracite coal.

"Chicago By-Product Coke Company supplies gas made in its coke ovens to the Peoples Gaslight and Coke Company of Chicago, a public utility of the State of Illinois, supplying gas to the public in the city of Chicago and vicinity, and is under obligation to provide gas for said public purposes to the extent of an average of 35,000,000 cubic feet per day. The quantity, quality, and British thermal unit content of the gas so furnished must be constant to comply with the rules and regulations relative to public gas supply in the State of Illinois. All of the gas so furnished is distributed to the public as aforesaid under the obligations of the Peoples Gaslight & Coke Company of Chicago imposed by its franchises and regulatory statutes of the State of Illinois. The Peoples Gaslight & Coke Company of Chicago is dependent at all times upon the gas received from the petitioner to enable it to meet and perform its said obligations and to maintain adequate and sufficient public service.

"In addition, Chicago By-Product Coke Company produces approximately 550,000 tons of coke per annum, the quality (537) of which must be satisfactory to meet the requirements of Peoples Gaslight & Coke Company of Chicago, which purchase a large portion of it for the manufacture of water gas for distribution to the public in Chicago and vicinity. Substantially all of the balance of the

coke produced is sold for domestic purposes.

2574 "Donner-Union Coke Corporation supplies gas made in its coke ovens to Iroquois Gas Company, a public utility of the State of New York, supplying gas to the public in the city of Buffalo and vicinity, and is under obligation to provide gas for said public purposes in reasonably constant quantities and of constant quality and British thermal unit content to comply with the rules and regulations relating to public gas supply in the State of New York, all of which is distributed to the public as aforesaid under the obligations of the Iroquois Gas Company imposed by its franchises and the regulatory statutes of said State. The Iroquois Gas Company is dependent at all times upon the gas received from petitioner to enable it to meet and perform its said obligations and to maintain adequate and sufficient public service.

"Rainey-Wood Coke Company supplies gas made in its coke ovens to Counties Gas & Electric Company, a public utility of the Commonwealth of Pennsylvania, supplying gas to the public in the Boroughs of Norristown, Conshohocken, (538) Bridgeport, Narberth, Ardmore, and other boroughs in the State of Pennsylvania, comprising substantially the entire main line, and Schuylkill Valley sections of the Philadelphia district, and is under obligation to provide gas for said public purposes for the entire requirements of said Counties Gas & Electric Company and of constant quality and British thermal unit content to comply with the rules and regulations relating to public gas supply in the Commonwealth of Pennsylvania, all of which is distributed to the public as aforesaid under the obligations of the Counties Gas & Electric Company imposed by its franchises and the regulatory statutes of said Commonwealth. The Counties Gas & Electric Company is dependent at all times upon the gas received from petitioner to enable it to meet and perform its said obligations and to maintain adequate and suffi-

2575 cient public service.

"The Rainey-Wood Coke Company also supplies coke in large quantities to like public service gas corporations in the Commonwealth of Pennsylvania for use in the manufacture of gas distributed by them for public use, including the United Gas Improvement Company operating the Philadelphia Gas Works and supplying gas to the public within the city of Philadelphia, the Consumers Gas Company supplying within the city of Reading, and the (539) Allentown-Bethlehem Gas Company supplying the cities of Bethlehem and Allentown and vicinity, all in the State of Pennsylvania. Large portions of the coke produced are sold for domestic purposes. Coke sold for gas manufacture and domestic uses is sold in competition with anthracite coal.

"The petitioners are, therefore, engaged in public service in their said respective States, and their status as such has been and is recognized by the respective public authorities therein.

"In the case of Rainey-Wood Company, its coal is procured under a contract for twenty years made with an affiliated company, W. J. Rainey (Inc.), owning and operating bituminous coal mines in the Connellsville and Greensburg regions in Pennsylvania. The coal supplied uder this contract is for the entire requirements of Rainey-Wood Coke Company, which takes the entire output of certain of the mines operated by W. J. Rainey (Inc.).

"In the case of Seaboard By-Product Coke Company, its contracts for coal supply are made yearly, said contracts providing that a certain amount of tonnage be regularly delivered, mined at particular mines located in the coal fields of Pennsylvania, Virginia, and West Virginia, which produce high-grade by-product coking coals.

2576 (540) "In the case of Chicago By-Product Coke Company, the coal is procured from an affiliated company, the Melcroft Coal Company, which operates two mines in Harlan County, Kentucky, which is the center of one of the best by-product coal fields in the United States. The Chicago By-Product Coke Company takes the entire output of these two mines. Additional coal is secured by the taking of the entire output of another mine in Pike County, Kentucky."

2577 By Mr. BROWN: (540)

I did not draw the paper personally. I gave the information from which it was drawn and passed on it and swore to it.

By Mr. GUTHEIM: (541)

Confining myself to the operation of the Seaboard plant, the first essential to economical and successful operation is continuous operation; second, a continuous and regular supply of uniform quality high-grade coals. We are under contract to furnish daily, every day in the year, a fixed amount of gas to the gas company. The gas company has no facilities to produce that gas any other way. They, under their franchise arrangement, are compelled to furnish the gas that the public needs. If there is a breakdown in our plant we are heavily penalized. The gas company gets in wrong and the public are out of domestic fuel. It is absolutely essential, therefore, that we have constant operation. The situation in respect to the Chicago plant is the same, except that our obligation is greater, due to the fact that we give them more gas, including the water gas, and that we have to furnish them with all of the coke that they need for their own water-gas plants which they operate. (542) We give them probably 40 to 50 per cent of the gas, both coal and water gas, they send out during the year, and they serve, I judge, 4,000,000 people.

A by-product coke plant cannot be shut down. It is built of silica brick, which has a very high factor of expansion, and it cannot be shut down rapidly, and it cannot be shut down without some injury to the plant, before stopping. (543) A by-product coke plant is

generally made up of one or more blocks or batteries of ovens.
2578 The plant at Seaboard consists of three batteries, or three blocks of 55 ovens each. Each oven is approximately 39 feet long, about 10 to 12 feet high. These vary in height. They are all of one height in one plant, and vary from 14 inches to 20 inches wide, average width. On each side of an oven is a system of flues in which gas is burned and the oven is heated through a thin silica wall, four to six inches in thickness. We charge the oven first. The coal is brought in and is generally pulverized and mixed very carefully by weight. At Seaboard we use two or three different kinds of coal, some low volatile, and some high, so as to get a mixture that will make a satisfactory coke for our trade. The coal is taken up, put into a bin over the ovens, then into a larry car, and charged into the oven. It cokes, then, in from 14 to 18 or 20 hours. Then (544) it is pushed out onto a quenching car, is taken to the quenching station, quenched, dropped to a coke wharf, fed on to a belt into the screening station, is screened and sized, and loaded out into cars or trucks or barges. While the coal is being carbonized the volatile matter in the coal goes off through gas mains in the form of gas and tar and benzol products, is taken through the by-product apparatus and divided, and sulphate of ammonia is extracted. The tar is taken out. In some plants the benzol products and the gas are purified and shipped out, pumped out to the gas company. The ovens proper have thin silica brick walls varying from about four to six inches in thickness. Before starting a plant it is necessary to heat it up very gradually. Silica brick has a very high factor of expansion. A battery of ovens alone, one battery, will expand as much as four feet. The expansion joints in the brick work are between each oven, and so we are
2579 compelled to heat the ovens very carefully and very gradually, taking from six to eight weeks to heat a plant up before we put it into operation. If you shut a plant down suddenly, take the heat off, (545) it would wreck the brick work completely, and it would cost you, depending upon the size of the plant, from $300,000 to $500,000.

By Commissioner AITCHISON:

As to whether the situation in that regard is similar to that of the glass blast, I am not familiar with the glass industry and could not answer.

By Mr. GUTHEIM (546):

A by-product coke plant composes part of some general steel plants. The by-product coke operation is one of the most highly technical, one of the most delicate and most accurate in connection with the manufacture of steel. It is a thing that requires the most constant and careful attention. Your coals have to be watched very carefully. You employ on every plant quite a large number of highly trained technical men. One of the presidents of one of the steel companies told me recently that he thought it was the most

delicate and difficult operation in connection with the steel industry. As to the complete time that we would probably have a battery out, in the event that it would have to be cooled off, taking into consideration the reheating process when it was finally mended, it would probably be from 2 to 3 months. In addition to cooling the battery off and heating it up, no matter how carefully you do it, the battery would crack in places. You would have to put men into the ovens before you started them up and point them up again. That would take time. If you had a serious accident, as you might have, for instance, virtually wrecking a battery, which it would be very easy to do, you would have to have these bricks. They are not carried in stock in large quantities. They are especially moulded special shapes, and it takes about four months from the time
2580 you start to make a brick until it comes out complete. It would take probably eight months to replace the brick work in a battery, as a minimum, I should say.

As to why the regular supply of a particular kind of coal is necessary in the operation, I will confine my remarks largely to the Seaboard, to be more specific. (548) The reasons are similar in the other plant we have mentioned. The first reason is that you must have a coal that will give you the volume of gas of such a quality as will meet the requirements of the gas company. Coals do not all have equal gas content, and you must have a coal sufficiently rich to furnish sufficient gas to insure a constant supply of gas. The other reasons are that the Seaboard plant is a merchant coke plant, one that has to find its markets in the vicinity of Greater New York. The markets at the present time are: Some blast furnace coke; some foundry coke; probably 60 per cent water-gas coke; and 30 per cent domestic coke. At Seaboard we must have a coal of such a quality that it will meet the requirements for all of those uses. It must be a coal, or a coal mixture, that will give you coke that is low in ash, low in sulphur, and that has not a low fusing point of the ash. It must be uniform in quality, because otherwise you get into trouble with your trade.

By Commissioner POTTER:

As to whether we burn a mixture according to the requirements of our coke, (549) we establish a mixture for the trade we are running. You cannot vary it. I mean you cannot run part of your plant on one mixture and part on another. You have to run it pretty uniformly; your whole plant at once. We make at one time one coke that will serve all those purposes.

By Mr. GUTHEIM:

2581 If you get a swelling coal, that coal expands during the coking process, and jams in your ovens and injures the ovens. The oven walls are very light. I have seen a case where the coke swells so badly that it took eight times as much power to push the coke that it normally took or that it should have taken. The result

was that the walls of the ovens were wrecked in an endeavor to push the coke out. (550) There is another condition where you get a coal that does not coke. In that case, it will crumble in the oven and have to be dug out. It is almost like sand. You do not get coke at all.

By Commissioner POTTER:

The coal analysis gives you an approximation only of the ability of a coal to furnish the gas requirements. For instance, if we are going to make a contract for coal from a mine that we have not been using coal from, we will analyze it first; we will see that it has, for instance, a low sulphur content, which is necessary. We see that it has a volatile content that is about right and an ash content. A volatile content of 16 or 17 would probably swell and wreck your ovens. We have to figure that very carefully. (551) Generally the best results for a plant like the Seaboard are secured by a mixture of the high volatile and low volatile coal that gives you an average. If suddenly you had to change to high volatile coal you woud be embarrassed by that change. It would affect your coke and your gas output. You would generally get more gas with the high volatile. Before we contract for coal—that is, when we have the time—we insist on, say, 500 or 1,000 tons shipped to us, and that is run through the plant, and if possible sold to our customers and tried out in a foundry or in a water-gas machine. To illustrate that, we have in Chicago a small battery of ovens that we use as a testing plant. That battery has been in constant use, running tests
2582 for nearly two years now. The Carnegie Steel Company, for instance, before they decided about building their last plant, sent 1,000 tons of coal out there, running it actually through that plant and tested out the coke. So with the other companies we are dealing with, gas companies and steel companies.

By Mr. GUTHEIM: (552)

In the Koppers Company we maintain a very large technical organization. We have several hundred university graduates and connections in France and England. We have men constantly in Europe, and keep in touch with the situation all over the world. At Chicago we have tested coals from Australia, England, and every section of the United States. It is a fact that we have to aim in our by-product coking operation at what will compete with Connellsville coke. We compete with Connellsville coke and with anthracite. We have to have a product that will be uniform and at least the equal of Connellsville. We try to have one that is better. That means low sulphur and uniformity in structure. At Connellsville the beehive plant is located at or adjacent to the mines.
2583 (553) It always gets the coal from the same mines. It will always get a uniform supply of coal and that gives them a uniform product. With the by-product oven we must establish a similar condition. It is necessary for us to absolutely keep the gas free of sulphur. Gas is tested throughout the day and night, every

day in the year, as to sulphur, napthaline, and B. t. u. content. We are held very rigidly to those requirements.

It is not possible to set down any hard and fast rule with respect to the coal requirements for all by-product coke plants. That is always a question that has to be taken up locally. It is a matter of business. For instance, it is not practicable to bring coal from lower Virginia up into the Pittsburgh district. You must design your plant to use the coals that are available, and the conditions surrounding the use of the coal vary, or the requirements of the coke. One of the essentials, however, in coke for all purposes is uniformity. It is better to have an inferior coke (554) that is constantly of one quality than to have a better coke that changes hourly and daily. A blast furnace manager will object very vigorously if you give him one kind of coke for half a day and another kind for the next. He will get into all sorts of trouble. (555) The Seaboard markets consist of metallurgical coke as used in blast furnaces and in foundries. It also furnishes coke to plants operating water-gas machines, such as the Brooklyn Union Gas Company, the Consolidated Gas Company of New York, the Kings County Gas Company, and the Public Service Gas Company of New Jersey. We also sell domestic coke. A coke for a blast furnace does not necessarily have to fill all the requirements that the coke you make for the merchant trade has to fill, such as Seaboard. Seaboard must have low ash coke for a water-gas plant. It must have a coke that does not fuse at a low temperature; the ash does not fuse. Otherwise a water-gas ma-
2584 chine will become clinkered and the capacity may be reduced 50 per cent. The condition with reference to the Chicago operation is almost identical with Seaboard. For illustration, at Chicago the difference in water-gas practice when using a good coke is that it takes about 28 pounds of coke to produce a thousand feet of gas, and when using a different coke it takes about 42 pounds, or a difference of approximately 50 per cent. If a gas company buys good coke from you, and you give them bad coke, you are penalized. (556)

By Commissioner POTTER:

We not only must take coal from a given field or fields, but we must take it from a specific mine. For instance, at Seaboard today we are using and have contracted for high volatile coal, to use about 67 per cent high volatile and 33 per cent low volatile from specific mines. Recently I came across a mine mining the same seam of low volatile that we are now using, and very similar in analysis. I felt that six months or a year hence I could make a good trade with that mine and I had 10 cars of that coal shipped to two of our plants to test out. We found that while that coal was very similar, the fact is that we would have to use 50 per cent of that low volatile coal with 50 per cent high volatile coal in order to get coke equivalent to the kind we are now making. That would upset our gas calculations and our operation generally. (557) As to whether

if we had this mixture and there was a car shortage in the Pocahontas field we could substitute coal from the south Ohio field for the coal from the Pocahontas field without any trouble, we could substitute it, but you would not get the same coke, and it would cause trouble all along the line. We had just such an experience as that which led up to the purchase of these cars by us. We did not want to buy cars. Off-hand, they are not a good investment for us. The only good they are to us is to insure a constant supply of suitable coal. If it be supposed that you want to make coke
2585 of Pocahontas and Elkhorn, Ky., coal, and you were not able to get one of them, Hocking coal and northern Illinois coal would spoil your gas output, and it would get you into very serious trouble with your coke output. As to substituting Thacker or Kanawha coal, Thacker seam might be pretty good. (558) As to Pocahontas we could not.

By Mr. GUTHEIM:

These various qualities of coal cannot be readily ascertained by laboratory analysis. Laboratory analysis is only an approximation. We do not commit ourselves to any large purchase of coal without full size oven test, in which we examine the coke very carefully, and if possible, use it in a water-gas machine, or sell it to a customer and have him try it out in his plant. Laboratory analysis will not indicate invariably the resultant coke that you will get from any particular coal. I have just explained that to the commissioner, how we have just tried it out within the last few weeks. It will give you an approximation, but that is all. You must remember that the plant is run for coke and gas primarily. If your quality of coke goes off, you are in trouble financially; the same with your gas. (559) I can give illustrations where great damage has resulted from poor quality of coal. In the case of the Lehigh Coke Company, at South Bethlehem, I will show you a comparison. In 1915 we put into operation a plant for the Laclede Gas Company. That plant has been running over eight years. They have never replaced a brick and never lost a charge. They selected their coals very carefully and have used good coals. Their repairs have been virtually nothing and they have had a most satisfactory performance. About the same time we put into operation at Bethlehem, Pa., two batteries of ovens built most carefully. The management there insisted on using in that plant a swelling coal. We did everything in our power to stop it. The result was that within two years those batteries had to be rebuilt from the ground up at a cost running into certainly over a million dollars. I do not remember the figures. The experience we had at Chicago, the only serious accident we have had in starting a coke plant, will illustrate how coals operate and how delicate this operation is. We started that plant about two years ago. There was a great deal of money tied up in it. We were a little late in getting it started. It was a very serious situation for us. (560) In order to be especially careful I sent the best

men we had there and cautioned them all to watch and see that everything went off nicely. It started on Thursday. On Saturday morning they came in and reported everything was beautiful; three shifts of men worked like veterans and the thing was fine. Sunday night, about half-past six, I was called on the telephone and
2586 told that an operator had slipped a cog, that the plant was in serious difficulties, that as near as they could tell a large percentage of the ovens seriously injured, and that the batteries might have to be completely torn down and rebuilt.

By Commissioner POTTER:

We were very careful, in selecting this force, to put a man there who was an experienced heater. He had never worked, it developed later, with the coal that we were shipping him. It was a very rich coal, very high in gas, we found. He was taken sick during the night and left his helper in charge and cautioned him not to reverse the heats on his oven except every hour. The ovens were then quite cold. His helper did exactly as he was told to do and suddenly discovered that something was wrong, and before he had discovered it and corrected it he had fluxed or melted part of 85 per cent of the walls in that plant. That little accident fortunately was discovered quick enough not to wreck the entire plant and put it out of commission. It cost us probably a quarter of a million dollars, and, except for his discovering it when he did, would have cost us at least a million dollars. In that case that accident should not have happened, but it happened because the fellow was not familiar with the coals. It shows what a change of coal would do. You can coke a great many coals in a plant, but you cannot make a coke and a gas that is satisfactory and of sufficient quantity. You have got to stick right to your requirements on gas and on coke or you cannot sell it and you will go broke. Not all bituminous coals are coking coals. Coking coals mostly will produce by-products, but all coking coals do not make good coke (562) and are not ideal for by-product use. Among the coals that are available for by-product use, some have advantages over others for particular uses. Another feature
2587 is the preparation of the coal. There may be two mines which mine from the same seam and the coal is naturally equal. One mine prepares its coal well and another mine does not. One mine has picking tables and takes out the slate; another mine does not. You must deal with the mine that is responsible and knows its business, and you have to hold them down to a very strict specification. You must deal with a mine that can meet those specifications. The coal industry has a great many mines, even where the coal is fairly good, where they do not prepare it well.

By Mr. GUTHEIM (563):

I can summarize that Chicago accident by saying that we had good coal and had a good man, but we did not happen to have a man who knew that particular coal.

We do not use a coal alone that expands. We do use coals that expand by mixing them with coal that does not expand. In a coke plant you are testing all day long. You keep a corps of chemists there that check every movement you make. You have on your ovens heaters that we train for years before we put them onto them, that are experts in watching that heat. (564) For instance, we have from 15 to 20 university graduates on the Seaboard plant alone, and in our business, I judge, not only four or five hundred university graduates, but men who are given practical training in our business in addition to their technical training. We maintain an organization that goes about helping the consumers of our coke. In the New York territory up until a few years ago the water-gas was made almost entirely with anthracite coal. When we first started to sell coke to those gas companies they did not know how to use it and said that it was no good. They could not get results. So we had to show them, which we did. We do that even in the domestic trade. At St. Paul we demonstrated last year in over 5,000 homes how to use coke. If you get your trade educated to using a particular coke and your coke changes quality you have to educate them over again, if the quality is still fairly good. But (565) if you get a bad quality of coke you get into all sorts of trouble. For instance, if the Brooklyn Union Gas Company 2588 is using coke from us, and they have about enough water-gas capacity to take care of their peak loads when getting a good fuel, their capacity, if we give them bad fuel, is cut down, and they can not supply the public. It is a very serious situation. As to Seaboard by-product coke competes primarily with beehive coke in the metallurgical trade. That includes blast furnaces and foundries and things of that sort. We also compete with beehive coke in a much less degree in the water-gas trade and the domestic trade. We compete with anthracite primarily in the water-gas trade and in the domestic trade. The Rainey-Wood operation in the sale of their coke are substantially in the same position.

As to whether before we bought our private cars we were handicapped in car shortage periods in competing with beehive coke in the markets I have mentioned, we were very seriously handicapped. (566) The beehive coke oven is located adjacent to the mine which supplies it continuously. That gives them a constant uniform product. They have to be able to get ample cars to take that product to their consumer. We, on the other hand, were compelled to use all kinds of coals, coals that would vary all over the map. We did not know from one day to another what kind of coke we could make. We could make no promises and could not keep them if we did. On one occasion at Seaboard when we were very low in coal our superintendent and manager went home with instructions to use a certain number of cars that were in the yard. The railroad set in a few more cars during the night. The result was the operators happened to pick up those new cars and put them

into the ovens, swelling coal. They almost wrecked three or four of those ovens. They pushed the walls 3 or 4 inches out of line. As to whether during these last several years when there has been a stringency in the coal trade at different times, we have come at times pretty close to a shut-down, the answer is, yes. At Seaboard we were on the narrow edge for quite a while and for a while we were unable to make all (567) of the gas we were obligated to
2589 make and were penalized for failure to deliver. We only got through by the aid of the Government officials, who did all in their power to help us, who were very fine about it, and I think we got as good treatment as we could possibly expect, but they could not do impossible things. They gave us coal that was available, and it was very irregular and of very poor quality. Some was good, but the average was very bad. (568)

Q. Now, outside of what you got through the efforts of the Government, were you in a position where, when you went out to buy coal, you could not buy coal that was suitable for your use?

A. No.

During 1922 we bought something over a hundred thousand tons of British coal shipped in by water. Great Britain produces a lot of good coal, but we did not get that. We got what we could, and we got into a lot of trouble. As to the period prior to our ownership of private cars, back in 1919 and early 1920, we would buy spot coal and paid as high as $15 to $17 a ton to get it. But it was very inferior in quality and very irregular. Irregularity just makes no end of trouble for us. Our troubles with respect to coal hampered us particularly in our endeavor to build up our coke market. It wrecked us. Our files have many letters of complaint. Taking the period leading up to 1920 and the early part of 1920, our manager kept after us to get him cars. We fought him off for about six months. His files had many letters of complaint and his telephone, when I was in his office, was ringing all the time with people who were indignant and mad with the kind (569) of coke they got, until they got the impression that Seaboard coke, in our markets, was a hopeless product. Our losses were heavy and we had to make adjustments and pay penalties and had no end of trouble, which forced us to buy these cars when we were not in a financial position to stand it and did not want to buy them. We told the trade that they could not expect to get the kind of coke that we had accustomed them to previously, but we hoped to give them good coke later. We blamed the coal mines all we could, but that did not help our business. We lost our trade—what little we built up. The trade went to our competitors. It went to anthracite. We got absolutely discredited in the water-gas industry. It went also to the beehive coke.

2590 By Commissioner POTTER:

It is true to some extent that any embarrassment to the by-product industry, as an industry, will inure to the advantage of

he beehive industry. It is absolutely true where you have direct ompetition. (570) Of course it would help the beehive industry. f I am trying to sell the Wharton Furnace Company coke and some roducer of beehive coke is trying to do it, and he knows he can get fair quality of beehive coke and does not know what he is going to et from me, he will not deal with me.

By Mr. GUTHEIM:

The manufacture of coke is a much more vital industry than most people realize. It goes into all kinds of things. The by-product coke industry is one of the most vital industries that there is and it should be encouraged in every way. It is vital to the private individual, to the householder. It helps to cheapen the cost of domestic gas. It helps to furnish a supply of high grade domestic fuel at a lower price than anthracite. It helps the farmers in furnishing fertilizer. It furnishes the best raw material for fertilizer that there is developed in the industry in this country, and has increased the output of sulphate of ammonia available for the farmer over 100 per cent in ten years. Furthermore, it is one of the few products that the farmer is compelled to buy that is selling for today at the same price that it sold for ten years preceding the war. (571) In the competition with beehive coke, as in periods of car shortage, the beehive coke producer does not need transportation for his raw materials. He is right there at the mine. My observation has been that they are able to get cars which they need to take the coke from the plants, so in times of peak loads, which is the time that the beehive oven operates, and we are in greatest trouble in the matter of transportation, they seem to get all they need.

By Commissioner POTTER:

2591 The use of the by-product process has been extended during the last 20 years. In 1900 I think we produced a little over a million tons of by-product coke in the United States. In 1920 I think we produced 28 million tons. The burning of raw bituminous coal is an economic crime. We put up in smoke, through the burning of raw bituminous coal, annually over a billion dollars of the natural resources of the United States. The beehive coking process is one of the most extravagant and wasteful processes that there is. In Congress it has been suggested recently that we should legislate against the making of beehive coke. I do not approve of that because we have got to do these things economically and gradually, but by-product coke has become so universal in the steel industry that it is generally conceded a steel company who makes pig iron cannot live in competition with other companies unless they own their own by-product coke plants. They are all getting it as fast as they can finance it and build it. The by-product industry is absolutely economically sound. It cuts the cost of pig iron and the cost of domestic gas in the cities where it is used. If it were not for that we could not sell gas to Jersey City. We could not sell in

competition with anthracite unless we beat the cost. We sell our domestic fuel at a lower price. It is the basis for many of our principal products, for our dyes. It is the best and surest source of supply for high grade fertilizer that there is. (575)

By Mr. GUTHEIM:

As to the necessity of the by-product industry in the matter of foreign competition, we cannot continue to pay our working people as we want to pay them, and ought to pay them, unless we practice all kinds of economies. We are ahead of the rest of the world generally in plant layouts and design. We have got to keep ahead of them in economic operation. Germany has not made beehive coke for 20 years. Another thing about this by-product coke
2592 industry is that it is the most important industry in time of war. During this war Germany's great power to hit hard, as at the beginning, was its preponderence of the by-products of coke. During the war this Goverment authorized the building of 1,500 by-product coke ovens to help out the situation in order to get ammonia, benzol, and those products. The by-product coke industry, in my opinion, is also the basis of our future chemical industry, especially the dye-stuff industry. (574) It is my impression as a competitor that the beehive coke oven ordinarily receives a continuous car supply. I am not in the beehive coke industry, but I never heard of them complaining. I never heard of a beehive oven storing coal.

By Commissioner POTTER:

As to industries that have been built up as a result of these by-products, our dye industry has been improved and grown enormously. There has been invested in the last ten years in by-product coke plants and their accessories over 200 million dollars. It has gone a great way in the cost of steel. It has cut the cost of gas in the municipalities where they use it. It is used almost entirely in St. Paul, largely in Minneapolis, Chicago, Indianapolis, (575) St. Louis, and Baltimore. It is used around Philadelphia, in Buffalo, and in northern New Jersey. Those are the ones that I think of just offhand. I have in mind percentage figures of the values in coal that are saved in the by-product process, as compared with the value that is saved in the beehive process. We have certain obvious losses when coal is coked in the beehive ovens. For every ton of coal that you coke in a by-product oven you save approximately—varying with the kind of coal that you use—25 pounds of sulphate of ammonia, which is selling to-day at 3 cents a pound. That is 75 cents per ton of coal. You save 6,000 feet of gas, varying in value in different locations. Suppose you say 40 cents for that; that is $2.40. You save 10 gallons of tar, worth 4 or 5 cents. At 4 cents, that would be 40 cents per ton of coal. You save about 3 gallons of motor fuel, worth 18 cents today. In some plants we do not recover that, as where your gas is very valuable, (576) because it

pays you to sell those heat units in the form of gas rather than motor fuel.

2593 (576) That is all per ton of coal. As to whether what we save in the by-product oven is worth more than the coke that the beehive makes, in some cases I guess it is about worth the same. It depends on how you figure that. I am taking these by-products at the point of delivery. If you take coke at the mine, it would figure that way. At any rate, there is a saving which as a matter of economics has led to the development of the by-product process. In producing 24,000,000 tons of beehive coke in a year, which was produced one or two years ago, there was lost 96,000,000, market value, of the natural resources of this country. Ninety-six million went up in smoke. In other words, that is nearly $4 a ton loss. (577) That is not net loss for it costs something to recover that, but your resources are gone: the fuel values of the country are gone when you put them up in smoke.

By Mr. GUTHEIM:

By-products tar is used for many purposes, but primarily, creosote oil is recovered from it and that is used for preserving timber and the tar is used as a road material. The drug industry and the dye industry I have already mentioned.

It is not necessary to operate the beehive oven continuously. The beehive oven is a very crude, simple, inexpensive structure. It is not made of silica brick. It can be started up on short notice and shut down without any serious injury. Therefore, it has that advantage, to take care of peak loads when there is an enormous demand for coke, especially in times like this. (578) My impression is, as a competitor, not being in the anthracite business, that the anthracite coal is taken away from the mines continually as made and that they do not have any serious difficulties in the matter of transportation. As to whether it is my understanding that they do have substantially a full car supply, that is my understanding.

By Commissioner POTTER:

As to whether the by-product industry, by providing a substitute to some extent for anthracite coal, tends to make it possible to
2594 supply fuel requirements with shorter hauls, it does that, I think. (579) If it were possible to use, in a by-product plant in Chicago, a mixture composed of Pocahontas coal and Illinois coal, and perhaps Kentucky coal, and that plant would make coke which could be used for fuel, you would thereby, in effect, be substituting to some extent the transportation of Illinois coal instead of the transportation of anthracite from Pennsylvania, and thus lighten the burden in the transportation machine. We are doing that. We are not using Illinois coal at the present time. We are using Kentucky and Pocahontas coals in a mixture out there. We are putting in an additional bin—our plant is so designed (580) that we can only mix two coals—but we are putting in a bin

there with a view of testing out how much, if any, Illinois coal we can add and cut out that transportation. We are working on that right now. By virtue of the by-product process we are going to try to use certain Illinois coals in mixture with Pocahontas coal when we can not use Illinois coal for that purpose alone.

Q. And to that extent, you are making a new demand for Illinois coals?

A. We are going to try it.

There is not any question that we can make coke with Illinois coals. We have done it frequently. But the question is whether coke made from Illinois coals is worth what you save whether you are getting an inferior grade of coke, and the difference in quality, using the Kentucky coals, would justify the additional freight. That is the problem we have got to work out. There is very decidedly a prospect that the by-product furnace will broaden the use of certain coals and increase their value. (581) We are producing in St. Paul 250,000 tons of coke per annum. Almost all of that coke is taking the place of anthracite in the Twin Cities. Last year we had 165,000 tons of domestic coke on the ground in August. That pile of coke, the location of that plant, was one of the factors that helped to prevent a fuel famine in the Northwest.

Q. Now, coming back again to the question of transportation, which is worrying all of us these days, it would seem then that the more extensive use of the by-product process, as for instance, on Illinois coal, would make it less necessary to move anthracite from Pennsylvania to the western markets.

A. Yes, sir.

Good by-product coke is an excellent substitute for anthracite coal. It is better than anthracite coal which you usually
2595 get, because, if it is good coke, it runs low in ash and makes better fuel.

By Mr. GUTHEIM:

We are building a by-product coke plant at Winnipeg to supply coal and gas, both of which will be distributed by the local gas company.

By Mr. BROWN (582):

I think they intend to get the coal for that plant from up the Lakes in the United States. They can use Canadian coals. Canada has a by-product plant up at Nova Scotia, that we built, operating entirely on Canadian coals.

By Mr. GUTHEIM:

As to when and why we bought our private cars due to the shortage of transportation facilities, we went into business at Seaboard at first as carefully as we knew how. We made contracts for our coal requirements with the most reliable and strongest concerns that we knew. The failure of the transportation facilities of the country made it impossible for us to secure the coal that we had purchased.

We were compelled to buy spot coal; bought a good deal of coal through Government assistance on priorities; and we got into a condition of chaos as far as the coal supply was concerned. We had all kinds of cats and dogs to make coke out of. We made rotten coke, and we knew it. Our customers raised Cain with us and we became completely discredited. Our manager, who is a pretty vigorous fellow, just said he could not operate that property.

By Mr. BROWN (583):

This was in 1919 and the early part of 1920.

By Mr. GUTHEIM:

We had all kinds of complaints. I was frequently called on the long-distance telephone by our customers in the East. I do not usually go into that detail of our business, but I got into it deep then. We did not have the money. The property was losing
2596 money. We were in bad shape, and in desperation we figured out that the only way to solve the situation was to provide private cars. We took it up with the railroads. We sent a man to talk to the railroads that we proposed to haul the coal over, and they gave us no assurance of being able to take care of us, and advised us to make this investment in private cars. We then sent a man to Washington to take it up with the Interstate Commerce Commission, and we wrote this commission a letter asking them what they thought we should do. They answered it, and the letter was afterwards published. (584) As soon as we heard from them, the impression that I got was that they though it was a wise thing to buy those cars; that it was helping out the general situation. As a result, we made these purchases in June, 1920. Since we bought those cars we have been able to stabilize our business. We have been able to dispose of our coke, and we stand in excellent shape with our trade. We make fine coke, fine domestic fuel, and we have absolutely shipped coke as fuel for water-gas plants in New York and that vicinity. Mr. Aitchison was the commissioner that our representative, whom we sent to Washington, talked to. I am mentioning this letter and our method of procedure to show that we went into this thing reluctantly and as intelligently as we knew how. As to the recommendation of our plant manager that that was the only thing to do, we opposed him as long as we really could. We told him that we thought it would straighten out; that we thought the effect of the war would get over and conditions would improve; but as a matter of fact, it did not improve in a period of six months and we simply had to do something to relieve the situation. (585) I have a copy of the letter which I addressed to the commission with respect to this subject and a copy of Mr. Commissioner Aitchison's reply. As to a third letter from me, I have not that letter.

By Commissioner AITCHISON:

Our letter was published in the Traffic World, ostensibly with your authority. I do not know that.

By Mr. GUTHEIM:

2597 I did not give the information to the Traffic World. (586)

Commissioner AITCHISON. Would you perhaps accept my statement that I did not, and did not know that it had been published in the Traffic World?

The WITNESS. Absolutely. I would accept any statement that you make, as far as I am concerned. The article in the Traffic World said it was published by your authority. * * *

Commissioner AITCHISON. * * * There was somebody wrote, wanting the "splendid letter" which I wrote to Mr. Rust.

The WITNESS. I am morally certain that I did not write that letter, but I do not know that. It does not sound like me, because I did not think the letter was as splendid as it might be.

Q. (By Commissioner AITCHISON.) You did not get the impression from my letter that I was promising that the commission would not ever take up the matter of the reasonableness and fairness and lawfulness of the car distribution rules?

A. Certainly not.

Q. And put them on a basis which we found, on the facts developed (587), might be lawful and just?

A. No, sir; I did not.

Q. You understand that was our duty at all times?

A. Yes, sir.

Q. And that you, as a citzen, would have to conform to whatever was lawfully found by us, in such regard?

A. I appreciate that.

Q. And in buying your cars, you did that with the knowledge of that fact?

A. Absolutely.

Mr. GUTHEIM. Now, I would like to offer this letter, Mr. Commissioner, dated May 27, addressed to the Interstate Commerce Commission, Washington, D. C., and also the reply dated June 1, 1920, addressed by Commissioner Aitchison to Mr. Rust.

(The documents referred to were received in evidence as Exhibits R–9 and R–10.) (588)

2598 Commissioner AITCHISON. * * * I take it, in the light of the statement by the witness, Mr. Gutheim, that he knew that any decision, or any representations, that the commission made were subject to lawful change in this respect?

Mr. GUTHEIM. Oh, I am willing to stand on his statement in that respect.

Commissioner AITCHISON. And that there is no matter of estoppel, as far as the commission is concerned, in the offering of these letters? Am I correct? You are not producing these for the purpose of showing that the commission is estopped?

Mr. GUTHEIM. Oh, no. I am not producing that for any purpose of estoppel.

By Mr. GUTHEIM:

When you are confronted with a very serious situation and (589) are asking your stockholders to spend $3,000,000, you naturally go at it as carefully as you know how, especially when I was fully conscious of the fact that we were paying a big price for cars, and that as an investment in themselves it was a very poor investment. I sent a man to Washington to talk to any commissioner he could meet, and he reported to me that he had talked to Mr. Commissioner Aitchison. I did not go myself. The impression that he conveyed to me was that the commissioner felt that in view of the condition of the railroads and of the transportation facilities of the country he thought these private companies that would buy cars would help out the general situation. That was the impression I had.

Q. (By Commissioner AITCHISON.) Well, was there any talk about their being used preferentially and your getting 100 per cent at the time that other users, dependent on the railroads, were not getting anything like that?

2599 A. At the time we bought them, and I expect my letter shows that the understanding on our part was that we could use those cars up to the extent of 100 per cent to the coal mines, when we took all the coal away from that mine.

Q. Of course, the correspondence shows for itself in respect to that, but I am talking about the inquiry which the man that you sent down here made. I, of course, would be glad (590) to have the man here and I could discuss my talk with him personally, but as I have to do it second hand, I will ask you whether it was your understanding of the situation that he had been down here for the purpose of finding out whether for all time he was going to be able to get 100 per cent use of those cars as against everybody else or not?

A. No, sir; not for all time, and we did not so understand it.

By Mr. GUTHEIM:

Since we have been operating our private cars, we have been able to build up a coke market at the Seaboard plant and have been able to get the necessary coal supply at the Chicago plant. We have generally done very well, and we have built up an excellent reputation and a good market for coke, and stand well with our trade in the Seaboard district. (591) We did have some trouble in Chicago. I think it was last year during the railroad strike. The Louisville & Nashville had not sufficient engines and we did not get 100 per cent service or anywhere near it. We had trouble at that time, had to go out and buy straggling coal, and as usual, got a lot of bad coal. It made bad coke, and we got into trouble with our customers, but that was temporary. Generally, we have gotten along very well with these cars.

Fuel oil is growing as a competitor of by-product coke. It is being widely advertised and being used in increasing amounts in the domestic fuel trade. We are meeting the effect of that competition and of these advertisements practically from day to day
2600 in the sale of our coke for domestic use. It is my understanding that this competing fuel oil is transported to the consuming points in privately owned tank cars. As to whether one feature of the competition (592) is ability of the fuel oil seller to make continuous delivery, that is one of their talking points and it is generally, apparently, accepted by the trade through an experience of a long period of years with fuel oil in their industry. Oil is used to a great extent in the manufacture of water gas in combination with anthracite coal for coke and steam. From two and a half to four and a half gallons of oil are used to product a thousand cubic feet of water gas, depending on the oil and the specifications for the gas. Coke varies from about 28 pounds to as high as 43 to 45 pounds per thousand cubic feet of gas, depending on the quality of the coal. A continuous supply of this oil is necessary in the operation of water gas. (593) As to whether, as a matter of competition for the business of water-gas plants, such oil is received in continuous supply, the answer is "yes." We receive it at our own plant continually as we need it. That oil is shipped to us, and to most places, in privately owned cars.

By Mr. BROWN:

That is, privately owned tank cars.

By Mr. GUTHEIM:

As to why in the Chicago plant we operate both a by-product oven and the water-gas plant—the Peoples Gas Company needs capacity for about 40,000,000 feet of gas per day additional from us. The amount of coke-oven gas that we are able to give them was limited to the amount of coke that we felt that market would absorb. We did not feel, therefore, that it was safe for us to get a great deal more than 16,000,000 feet of gas per day. We only guaranteed 10,000,000 of coal gas, and in order to furnish the additional gas we built this water-gas plant, and the coke used in the water-gas plant goes on the belt (594) from the
2601 screening station into the water-gas plant and is charged into our machines without any expense of transportation. That gives us practically a self-contained plant there.

By Commissioner POTTER:

It has always been possible to use oil to make gas. Your coke oven gas is cheaper, generally.

By Commissioner AITCHISON (595):

With reference to the letter from Commissioner Aitchison dated June 1, that is introduced to show that we have gone at this as intelligently as I know how. That is all.

By Mr. GUTHEIM (597):

As long as the railroad situation is unable to insure us service that will insure constant, uniform supply of coal, such as we need, we would not expand our plants, if these cars are taken away from us. There is not any question that within a few years there will be an additional market for gas at Jersey City for our plant up there. (598) I am sure that our manager would not agree, but would oppose our extending that plant, building more ovens and giving him more coke to sell, unless the situation was such that he was assured of being able to furnish a constant supply of uniform grade coke of good quality.

By Commissioner POTTER:

What I mean to say is [such a] supply of coal that, by a reasonable amount of storage, we can feel assured of having the same quality of coals all the time, that is, coals that make coke.

Q. (By Mr. GUTHEIM.) Now, Mr. Rust, in that same connection, don't you have to consider that you must get your coal, so long as competing commodities that are sold in competition with your coke have a practically assured transportation service?

A. Absolutely.

(599) By-product coke-oven gas is already being used to replace the failing supply of natural gas in substantial quantities, especially in Pennsylvania, eastern Ohio, and western New York. In the Pittsburgh district there is now being used nearly 150,000,000 cubic feet of coke-oven gas per day in places where previously natural gas was used: 150,000,000 feet of gas is substantially the amount per day that is sent out by the Consolidated Gas Company 2602 of New York for its trade. It is quite a large volume of gas.

It is also being used to mix with natural gas in the supplying of that gas to Cleveland, Ohio. There is a plant built down at Fairmont, W. Va., by the Government during the war. The gas from that plant goes into natural-gas mains and is pumped to Cleveland and other Ohio points. It is being mixed with natural gas in Buffalo, with gas that comes from the Donner-Union Company. I understand it comes from natural gas. We are building a plant now in the vicinity of Ashtabula that is going to replace natural gas, which is playing out in that district. These by-product plants, augmenting the natural-gas supply, (600) must be built to maintain a continuous supply of coal, and the coal must be of uniform quality. That is the same condition at any plant where you have got to dispose of your coke. As to whether in my opinion I consider that the existing private-car rule, the assigned-car rule, is necessary if I am going to safeguard the supply of gas to the public for domestic use in the future, I consider it absolutely necessary, as long as the present conditions continue in the transportation situation of the country. As to whether there are any by-product coking plants in the country which are not operated on private cars, the necessity varies with the location of a plant. The Fairmont plant,

for instance, is within a mile or two of its coal mines, and I judge it would get along very well without private cars. I do not know whether they have them or not. When you get a long distance from your source of supply of coal, then the necessity of the private car increases as the distance increases. (601) In other words, it is a transportation problem, and your problem is more severe where you have more transportation per ton of coal carbonized. But generally, no coke plant can operate successfully and economically unless it secures a constant supply of coal that will give them a uniform product.

By Commissioner POTTER:

2603 As to whether if we have a plant and use a thousand tons of coal a day from a particular mine, and there develops a car shortage so that our mines have only 50 per cent car supply and we are able to draw only 500 tons a day of that coal, and have to get 500 tons more to run, and further, if we are in a coal shortage up to this time, everybody wanting coal and all the mines selling it, and we have to look around to see where we can get our other 500 tons a day, perhaps having to get it from 5 or 6 or 7 different mines at different places, and where we have no regular contracts that would supply us, we would be embarassed, we would. That is exactly the situation that forced us into buying these cars.

By Mr. GUTHEIM (602):

When there is a wild scramble in the country for coal, the kind of coal you get is the scum. We could not eliminate the use of private cars in the protection of any one of our plants by the storage of coal there. That is impracticable and very expensive. We do operate substantially that way in St. Paul, from necessity. It makes that operation very expensive. The situation in the Northwest is that the coal is brought up the Lakes and placed on the docks there during the open season of navigation. We have to carry about six or seven months' supply of coal on the docks, and at our plant. That means that we are compelled to use stored coal in that particular plant. Our records show that the plant is peculiarly well operated, with exceptionally good, able management (603) and that we get a lower coke yield and inferior grade of coke and a lower gas yield per ton, a lower tar yield, and a lower sulphate yield, also increasing cost of producing coke, gas, and other material.

By Mr. BROWN:

Everybody up in Minnesota has to use stored coal. That is a local condition that we meet and our competitors meet.

By Mr. GUTHEIM:

Our stored-coal situation in Minnesota has been such that in
2604 order to get by at all we had to haul rail coal from Kentucky to the Twin Cities. We have done it frequently. The coking operation on stored coal results in lower coke production and a larger

breeze production, which is almost waste production. Breeze sells in Minneapolis for about $2, and coke for about $12. At our two plants, Chicago and Seaboard, we furnish quite large storage facilities. (604) We have to store, try to store, from one to two months' supply of coal. We do that in order to protect ourselves against any possible breakdown in transportation facilities, and we keep turning that coal over. That is, we mix a little stored coal with fresh coal, so as not to send out to the public a product made entirely of stored coal, which they would not like, and would not stand for.

By Commissioner POTTER:

You store coal and it deteriorates very materially. You will find specifications for coke where they specify "made of freshly mined coal." They know it makes better coke. You store coal in large piles and it will heat up and catch on fire, and that injures the coal, injures its coking qualities, reduces the by-product yields and gas yields, and makes an inferior product.

By Mr. GUTHEIM:

The expense incident to the storage of coal is very large. In the case of the Seaboard, if we had to carry a six months' supply of coal there, we would have to furnish facilities for storing it, the land, and facilities for putting it in and out. We would have to furnish the money to carry that large inventory, and it would increase the cost of operating that plant probably three-quarters of a million dollars a year (605); that is, the storage of the coal and the loss of yields incident to using the stored coal. As to whether that would be further increased by having to store in large amount our coke, you would have to store coke at times, anyway.

2605 By Commissioner AITCHISON:

In my estimate of $750,000 I figured on storage of half a million tons, or a six months' balance. We use a million tons at Seaboard per year. If this is figured out in three months or sixty days, you would cut it in half. We have to carry one to two months, anyway. For instance, you will find our plants from now on are building up their storage, and will keep it up until after next April to see what is going to happen. We have to do that. We have to store all the coal we can. (606) We would have to do that in addition to the six months' supply, if that is what he had in mind.

By Mr. GUTHEIM:

Before we bought cars we tried to work out storing coal as an alternative to buying private cars until we saw that it was an impracticable proposition. We did everything in our power to avoid buying these cars. We did not want them. We did not want to make the investment. As to the financial result of operating our private cars to the latest date, September 30, 1923, it shows a loss of something over $800,000, the way our books are kept.

By Commissioner POTTER:

As to whether we would be willing to dispense with the use of the private car if we were assured of a constant supply of satisfactory coal delivered in railway equipment, we bought these cars purely as insurance, and that is the only reason we have them. To-day we do not need them so badly. We use them, but the railroads can take care of us to-day. (607) But at times they can not. When we need them, we need them awfully badly. The Government authorities here have cooperated with us because of our relation to the public 100 per cent when we have needed coal. We know they have done all they could for us, and all they got was rotten. We got rotten coke and rotten results. We could not live under it. Of course, when the railroads get where they can assure us, give us, 100 per cent service and take care of our requirements, we do not
2606 want the cars. We are not in the railroad business and we are not in the car business, if we can get out of it. But we have to run these plants and give service to our trade or we have to lose the money that is in them.

By Mr. GUTHEIM:

I mean 100 per cent the year round. The Seaboard By-product Coke Company was a finanical failure until we got these cars. The only time when cars are of value to us is in a car-shortage period.

By Commissioner AITCHISON (608):

When we do not have a car shortage, we keep them in the service right along, and the railroads pay us the mileage, or however it is worked out. As to what they do with our cars in the meantime, I can not answer. As to whether they are standing idle, I am not familiar with that situation. My inference is that the railroads would rather for us to carry the peak cars than to carry them themselves; but that is a matter for them to work out. If the peak is over and our cars are used by the carrier, I judge it puts its cars in the shop for repairs to get them ready for the next peak. I judge they are not earning money and the capital charge runs on just the same. Our case is a peculiar one. We have to give them [our customers] so much gas every day and we have to stock coke when we do not want to make it. We can tell within a few tons how much coal we will need six months from now. As to whether we can arrange our business so as to permit a reasonable amount of fluctuation in our daily supply as furnished by the carrier, it can not be done.

2607 (610) In other words, we have got to have just so many tons every day. This is not true if we have 6 months' storage on hand. If we have that storage on hand, we will use that. If we have a 60 days' storage on hand, we still must have every day the same number of tons come in, for this reason: If we have a 60 days' storage of coal on hand the first of March and there is a car shortage, we carry that coal to be protected if there is a strike

or any trouble at the mine, and we do not have to shut the people of Jersey off on gas. If we use up that coal during the car shortage and then this other emergency occurs, we are high and dry. The only equalizing reservoir that can be made is a large storage capacity. That increases the cost and increases the cost of these products to the public who has to pay for it. As to whether our business is such that if the railroads have a reasonably sufficient supply of equipment and give good service we (611) can get along the same way that other people do, well, there is one difference. We have to produce a given amount of gas every day. We have to use that much coal every day. If we can not get it, if we have to apply storage, that means increased cost, and we have to pay for it. We are here to try to avoid that emergency. We know what we are up against if we have to do this, but we know that is going to cost us money and it is going to retard the development of the industry. The immediate occasion of our buying cars was the breakdown in railroad service. If we had had sufficient service, we certainly could have got along without the cars, and would never have bought them. (612) As to whether that is true if the carrier has such an amount of equipment as it ought fairly and lawfully be required to have, and keeps it operating effi-
2608 ciently, I am not sufficiently familiar with what that means. Transportation business is not my business, and I don't know much about it.

Oct. 25, 1923.

(614) As to whether from the standpoint of the carrier, and the carrier alone, there is any difference in transportation circumstances or conditions with reference to the shipment of coal in our cars and coal from other mines on the same line of the originating railroad shipped to the same destinations intended, we will say for domestic use or for sale in an industry or purchased directly by the industries, other than the fact that we furnish cars in the one case and in the other the consignee does not, there is a decided difference. The difference is that we take coal, furnish business to the railroads continually, every day in the year of equal amounts, in good times and in bad. We do not contribute to the condition that brings about this chaos resulting from peak loads. We do not contribute to the situation that comes (615) in times of depression when the railroad needs business. We give them a uniform load, the kind of load that certain Government bodies have been trying to suggest we try to work out for coal, an all-the-year-round haulage. In other words, we make uniform call throughout the year for transportation, while the other consignees mentioned have demands which are more or less seasonal and not so regular. As to whether there is any other difference, I have in mind from the standpoint of the carrier, that difference gives the carrier the kind of business that makes it possible for him to operate at the lowest cost

and that is the most desirable business a carrier can have. I
2609 am not a railroad man, but that is just common sense. (616)
As to whether I ask that the lesser cost to the carrier from regularity of service be reflected in the rates, my answer is "no." As to whether we supply coke, which takes the place of coal in these localities that we serve, both anthracite and bituminous, to a considerable extent, we do supply it, especially as to anthracite. We do not compete much with bituminous, with coke. You can not do that. As to whether there are other utilities with whom we do compete in the furnishing of heat, as, for instance, private heating plants, we do not do that. We furnish gas to the Public Service Gas Company. (617)

Q. But you do compete with the sellers of anthracite, and to some extent with the sellers of bituminous?

A. Not bituminous. That is negligible; but we compete with the sellers of beehive coke; beehive coke and anthracite.

Q. Beehive coke and anthracite?

A. In a less degree, and a growing degree with oil. Those are our three competitions.

By operating as we do, we relieve the problem of transportation in times of peak loads in another way. For instance, at Chicago at the present moment we have in stock 100,000 tons of coke made during the summer and carried by us during the hot weather. That will go to the domestic trade in the winter. Except for that coke, somebody would have to haul 100,000 tons of anthracite or some other fuel during the winter months in addition to what they are going to haul anyway. (618) We do not consider those who deal in bituminous coal as competitors at all. There is such a great difference in price that no one except people who feel compelled to have clean fuel will buy coke to take the place of bituminous coal. As to whether we compete at all with the high-volatile bituminous coals and smokeless bituminous coals, we probably do to some extent, but not great. They go more into the steam power plants and we do not furnish coal for power plants. Our coke goes into the metallurgical market where you can not burn bituminous coal. As to whether the gas we produce is used in competition with bituminous coal, that gas is gas which, if we did not furnish it, the gas
2610 company would have to build additional plants to produce at a higher price. They have to furnish that gas. (619) These sellers of anthracite do not have to my knowledge the assigned-car privilege, but for some reason which, I suppose, is of habit or economic wisdom my impression is that the anthracite mines are able to ship coal as fast as they mine it. As to whether that was true during the recent trouble that grew out of the shopmen's strike, I imagine everybody had trouble then. Of course, we had trouble. The private cars did not work then. We were all in the same boat, I judge, at that time.

(The following telegrams were read by Commissioner Aitchison into the record:)

WASHINGTON, D. C., *June 3, 1920.*

. McARTHUR,
Seaboard By-Products Company,
Jersey City, N. J. (620)

Present laws do not provide for exclusive use by owners of rivately owned cars, and such cars must be counted against distributive share of mines. Can give no assurances such as you seek.

(Signed) CLARK, *Chairman.*

JUNE 4, 1920.

. McARTHUR,
Standard By-Products Coke Company,
Jersey City, N. J.:

Following my wire yesterday, see for detailed information Commissioner Aitchison's letter June 1, to your president.

——— ———, *Chairman.*

These telegrams went to our attorneys, to the people that were working. Mr. McArthur and I personally never saw this last 2611 telegram until just now. The other one I saw last night for the first time. As to whether that was antecedent to our making the purchases of these cars, we bought these cars the day after we heard from you verbally.

Q. (By Commissioner Aitchison.) Now, wait a minute. I would like to have the man produced who heard from me verbally, because the file I have here (621) indicates that he talked to Mr. Quirk, and Mr. Quirk passed the matter up.

A. The contract was signed, as I recall it, the 15th of June. However, Mr. Commissioner, let me say that at the time—I spoke to our attorneys this morning also, and to Mr. McArthur, they did not consider that Commissioner Clark's telegram conflicted in any way with your letter.

Q. Well, they had notice of it, anyway?

A. Yes; absolutely. This telegram shows that he had in mind what you had in mind.

By Mr. GUTHEIM (622):

The Seaboard uses about 2,800 tons of coal a day, or 56 cars. Chicago uses about 2,000 tons a day, or 40 cars. (623) I did not intend to convey the impression that we had to have at Seaboard, for instance, 56 cars every day in the year. I intended to convey that the aggregate must average that, and run considerably close. We carry at Seaboard from 30 to 60 days' supply of coal in order to take care of the regularities in transportation and any little breakdowns at the mines or elsewhere. But in case we receive 70 or 80 per cent or 60 per cent of our coal requirements for a short time, we will expect to receive that much more for the next short time. We must try to maintain a substantial storage. As to whether a 60, 70, 80, or 90 per cent supply over a period of a week or two

would be embarrassing if it was balanced in another week or
2612 two, it would not. That is not the kind of service we had for 10 months prior to the purchase of these cars. We were constantly with only a few days' supply, at times getting down to about a week (624) of coal at that plant and at times very little coal between us and our mines. We were compelled to go out and purchase coal to keep the plants going and that coal ran all over the map in chemical content. It made, as I explained, rotten coke, very irregular coke.

By Commissioner AITCHISON:

This was preceding our buying these cars, over a period of about a year. It got especially difficult in the first half of 1920. In the early summer of 1920 we were down to just a few days' supply of coal and had to cut our gas making in half. At that time we were under obligation to furnish only 14,000,000 feet of gas a day. To-day our obligation runs up to 25,000,000. If that shortage, however, had occurred in the winter time, it would certainly embarrass the gas company. As it was in the summer time, they have a reserve capacity of water-gas machines that they can put on very quickly, because their requirements are much lower in summer than in winter. To illustrate this situation and how critical it is, last night for the first time I think in six years or more which we have been operating that property, we had a breakdown of 2 hours. It occurred at 2 o'clock this morning, reported to us when we got up. In less than 20 minutes the vice president of the gas company had our superintendent at his house on the telephone. Our superintendent was on his way to the plant (625) but he was after us hot. I mean we have to watch that thing very carefully, and they must watch it.

2613 By Mr. GUTHEIM:

As to this time before we bought our cars, to which I referred, we had our coal needs covered by long-term contracts. I think you will find in the files here telegrams stating that we were not getting our contract coal; that the mines were not getting over 50 per cent car supply.

By Commissioner AITCHISON:

I understand that nobody was able to. At this time I could not answer whether railroads which were using assigned cars were able to or not. I don't remember. That was 1920. I recall that the commission gave us priority orders. I don't know how we got in under the order, (626) but I know that we used every effort to get coal. As to whether to a certain extent our trouble in 1920, about the time we bought these cars, was due to the fact that the commission had issued some priority orders which in terms did not include by-product companies, after we got priority orders, which eventually we did, our situation was not cured. We got rotten coal.

We got relief through Washington. I do not know whether it was technically a priority order or what it was, but we got relief, because we had a man here on one day, and we would have been compelled to shut down the next day if we had not received relief. (627) He got relief for us. I don't know how he did it. As to whether or not the interpretation which was being currently placed upon the commission's priority orders by the commission excluded by-product plants, I think I do recall that we were embarrassed at one time with such a situation, but prior to that, and throughout the entire period of the war, we operated under some form of Government priorities whenever there was a shortage, and when operating under governmental priorities we were always in trouble with our trade.

2614 We always got very irregular mixtures, made rotten coke, and had all kinds of trouble. Our files are full of complaints, and the files do not show one per cent of the complaints that came to me and to our manager over the telephone.

(628) As to the difference between the preferential use of railroad-owned cars under priority orders and preferential use of our own cars, if the Government issues today a permanent priority to us for cars, that will work automatically whenever an emergency arises. That is one thing. If on the other hand, when the emergency arises, we have got to come to Washington and first produce evidence to satisfy the authorities that an emergency does exist, and then the orders come to us to order coal from certain mines, where we must get it, and those mines are unable to deliver it for the moment, we are stopped. I think the United States Government can get us coal under any condition, but you can not give us the coal that we need. As to whether we want this priority over such classes of users as hospitals, jails, asylums, water plants, sewer plants, ice plants, bakeries, and railroads, I do not think it is necessary to give us priorities over those people. (629) Street railways, railroads, and ourselves, I think, are all in the same class because we serve the public. The Army and Navy of the United States serve the public. It is not for me to say whether I would put them all in one class. As to whether we could run our business if we were put in the same class and issued equal supply with railroads, interurbans, street railways, water plants, electric-light plants, heating plants,

2615 serving the public under franchise, governmental institutions such as hospitals, jails, court houses, capitols, and Army and Navy of the United States, we could not operate our business under conditions that would make it satisfactory to them to operate theirs. You can fire a steam plant (630) with a very great variety of coals, all at the same time, as you want to. You can generate electricity by all kinds of mixtures of coals. You can not make coke and you can not make gas in the quantity that you should make. One is an operation that must have a uniform quality of raw material, so to speak. The other varies all the time. Governmental temporary priorities such as we are discussing can secure coal to run a steam plant or a hospital or a battleship—any kind of a steam plant. I

don't think a battleship will run so well of course on all coal. I think a railroad can run on coal that we can not run on, because they buy coal that we would not take as a gift.

As to whether a similarity of quality is just as important with a battleship, a locomotive, or a steam generating plant of a big electric utility as with us, ratably, it is, but to this extent there is a difference. There are enormous areas of good steam coals, fair-grade coals, that are satisfactory (631) to a railroad for instance, or a hospital. There is a limited supply of coal and limited fields of high-grade low-sulphur, low-ash gas coal. As to whether if there are not cars enough to go around to serve all of these prior uses we ought to be at the top of the list, in the case of great emergency; for instance, a hospital—you would without hesitation take our supply if we owned the cars, owned the railroads and everything else and
2616 serve the hospital and shut off the people of Jersey City from gas, and we would speed you on. As to whether my thought is that because our industry is a critical one and important we ought to have first call, (632) we by furnishing the private cars are helping these people, helping these coal mines. We are removing the mines that serve us from competing with the other people. If everyone of these people has its own cars and there is a shortage of motive power to haul them—we experienced that about a year ago; we suffered and never complained. I would certainly haul the hospital [coal] first, possibly, or the water supply before the hospital, because the hospital would suffer. The next to receive coal is a problem beyond my province. I would have to study that out carefully and I haven't done it. (633)

Q. Because, if there is a shortage of motive power, or we have got a track that is so crooked and so mountainous that it can not possibly haul the demand that is made upon it by the mines, somebody has to be deferred. If there are sufficient private cars tendered to more than absorb the capacity either of the motive power or of the track, somebody has to be deferred, and I would like your judgment as to whether or not, if you have bought and are expecting to get coal from that locality, under those circumstances, you ought to get it first and other people step aside.

A. No, sir.

We are not complaining and we do not ask to be permitted to furnish locomotives or railroad tracks. We do not expect to get, and are not asking for, any preference in the matter of locomotives or tracks. We do not get preference in placement of cars, if the locomotives can not haul them or the tracks can not haul them. We experienced that last year. Our cars were not placed. We had them. We stored empty cars in our yard at Chicago, because the railroad could not handle our cars. (634) We would not expect in such cases that our cars would be hauled before coal for domestic purposes. We would only get our share just as we do without any private cars. We only get our share of the trackage

nd locomotives and that is all we ask for. We do not ask for nything but our share of placement in such times. As far as we re concerned, we only ask for the advantages that the ownership of the cars gives us, not the ownership of locomotives. We 2617 do not ask for preference on locomotives, or use locomotives, against anybody.

Q. (By Commissioner AITCHISON.) In other words, when there s stress, which is caused by the fact that more demand is being nade upon the track than the track can meet, when there is a shortage of motive power, when there is congestion at terminals through which the movement must go, when connections are unable to receive and turn back cars (635) and the like, because of similar troubles upon their own lines or anything else—in that case, you ask for no preference in the placement, pulling out, counting as against distributive shares of the mines, or the movement of your coal. Is that correct?

A. That is correct.

By Mr. GUTHEIM:

The gas we make supplies hospitals, private homes, any place that uses the ordinary service of a city gas company. The coke we make supplies hospitals for cooking or for heating as it would a private householder. Normally bituminous coal should never be used for heating a hospital. They should use cleaner fuel and not use as wasteful fuel, (636) if it can be avoided. For instance, if there is a hospital in Newark and a ton of coal is shipped in and burned there, about 35 per cent of the fuel value of that coal goes up the chimney in smoke, and is wasted in a time of fuel shortage. If, on the other hand, you will ship that coal to a by-product plant at Jersey City and then use coke or gas to heat that building, the public has about 30 per cent more fuel available from that one ton of coal than if they burnt it raw.

2618 At the present time we have our coal needs at the Seaboard and Chicago plants generally covered by long-term contracts. As to whether any of these contracts are for the entire output of particular mines, my answer is "Yes." We have been able to secure full delivery under those contracts with the use of our private cars, except in times of break-down or locomotive shortage or insufficient track facilities. (637)

With reference to the language in the commission's decision in this case, page 563, which, as I understand it, carries a suggestion or promise of future priority orders in emergencies, I can not conceive of any system of governmental priorities (638) that would give us the service that we need in our business in an emergency such as we have experienced. To illustrate, during the war by-product coke plants were classed very high among the essential industries and the Government did everything in its power to help us and the help was totally inadequate from a commercial point of view. We could not operate that plant successfully with such help. During the war we were able to do it, because the Government took our supplies

and fixed the price on the basis that gave us a reasonable profit. With respect to its chemical analysis, the coal that we get under our own purchases runs well under one per cent in sulphur, and averages probably five to seven per cent in ash. I should say it would average not higher than 6 per cent.

2619 (639) Under the priority orders we got coal that varied from around 1 per cent to 4 per cent in sulphur and in ash as high as 13 or 14 per cent and higher. The coking qualities were bad, in some cases impossible. In the case that I have mentioned it seriously injured a number of our ovens. As to the coal which ran from 1 to 4 per cent in sulphur, I should judge that you will find large quantities running very high in sulphur. I know such is the case as to running very high in ash. One of the worst features was that it was constantly varying. We could not get a constant supply of any kind. This is a basic industry. The product influences the output of many other plants, and their costs, and creates all kinds of (640) havoc with them. It goes into brass foundries, iron foundries, blast furnaces, and all sorts of places, and if you have an inferior grade or an irregular grade of coke you wreck their operation. One case I recall was concerning furnaces for heating houses, and they had instances of over 200 furnaces put back on them due, they claim, to rotten coke, and we could not disprove it.

By Commissioner AITCHISON:

Whether the railroad accepts our private cars and transports them to the mine or not depends on whether the railroad is willing to do it. I do not know whether the Norfolk & Western, for instance, would do it. I understood in buying the cars that we had that much of a risk. We took it up with certain railroads before. We are not asking the Commission to make a mandatory order which will require the railroads to accept our private cars and place them preferentially. (641) We are not asking any change in the order which we are operating under today. It is my understanding that that merely permits the carrier to do it if it wants to. We only ask for a continuation of the present condition. (642) With respect to the Norfolk & Western, I am not very familiar with the railroad situation,

2620 but if all of the railroads were as well equipped with cars as the Norfolk & Western we might not need them. But they are not in that position. My impression is that the Norfolk & Western has always been able to give service down there, and if that is the case that is all we want.

By Mr. GUTHEIM:

The privately owned cars have tended to stabilize the fuel industry in this country by removing from competition a very substantial tonnage in the way of coal mines. If, for instance, our by-product coke plants in times of railroad car shortage were compelled to go into the market that everybody else goes to get an additional supply of coal, that would tend more than ever to upset things and send the prices sky-rocketing up on coal on everybody. The more bidders

there are that are hungering for any one product the higher the price goes. This country has had a commission working for more than a year, or many months, in an effort to stabilize the coal industry and to improve conditions. You will find that the mines are served by private cars are in better condition physically, that the price of coal is stabilized throughout the year. (646) They get no very low prices and get a reasonable profit all the time. It is a very desirable situation. My impression is that the by-product industry, if it is not hampered and is permitted to grow naturally, will grow much larger, and as it grows the fuel industry will become more stabilized and it will help everybody. Assuming that 10 per cent of the mines having 10 per cent of the tonnage are served by private cars, 10 per cent of the coal industry is working on a reasonably stable basis. Suppose that we had not furnished these cars in times of shortage at mines, it would mean that instead of 10 per cent of the mines, that shortage would be something like 45 per cent for all mines.
2621 In buying these cars we have contributed to the public good in every way. We have certainly helped in reducing the average price of gas, of coke, and of all other fuel to the public, and that is very much to be desired.

(649) Certain letters of complaint received by the Seaboard By-products Coke Company, and answers written by that company, or its sales agents, being 23 letters, were offered in evidence "for the purpose of showing that certain statements are made, but not for the purpose of showing whether those statements were true or false" and received in evidence as Exhibit R–11. (650)

I believed the statements that were made in those letters were true and acted upon them in the usual course of our business.

By Commissioner AITCHISON:

These are complaints of people using our coke, primarily. (651) I do not think any of them are from mines. There are some answers explaining our situation. Debevoise & Anderson were agents in New York in the sale of our coke. When they said "you must understand that our failure to receive a proper supply of the necessary grade of coal is as exasperating to us as your operating conditions are critical," they are explaining to a customer that the reason they are not getting coke is because we are in trouble on the coal end. (653) This correspondence, with one exception, a letter from Lieutenant Bates (652) is between our manager and our sales agents. When I say that I think the facts are true, I know of the facts without reading those letters.

Cross-examination (654) by Mr. ROPIEQUET:

My statement that there was no competition with bituminous coal would apply substantially to our Minneapolis plant. As to whether our representatives appeared in the dock cases on the theory of competition between bituminous coal and our products, if
2622 you give people bituminous coal or make it excessively cheap by giving them preference, you will have a lot of filthy cities,

and nobody will burn clean fuel except a few wealthy people. I do not recall that our representatives appeared in those cases, but I judge they did. (655) Our Minneapolis plant gets a great deal of its coal from the Pittsburgh district, some of it from the Kentucky district, occasionally from the Illinois district, but not much. It takes the coal via the docks. It is specific coal stored for us. As to assigned cars, we have used them at the low end of the Lakes, but generally we do not, because the coal goes up the Lakes at a time when it is easy to get. As to the other plants of a similar nature to ours in this country, I have named the ones which we are familiar with. There is a similar plant at Terre Haute, one, I think, at Indianapolis, and one at St. Louis. Those plants and their products are in competition with our Chicago plant only in a very limited degree. (656) A coke plant has a limited radius of economical operation. You can not ship coke far against the freight. You can not pay two freight rates. The competition between the Terre Haute plant and the Chicago plant is not serious. It is only at times of very unusual conditions, when they have some reason for storing an enormous tonnage, but generally it is not and does not amount to much. These plants also produce the by-products that I have spoken of. There is substantially no competition in the by-products. There is competition, of course, but you can generally sell it at the market prices; like pig iron, it goes up and down with the requirements. There is competition as between by-products or coke as far as cost is concerned. A coke plant located close to a mine buys its coal because of low freight rates (657) at a low rate. (658) The East St. Louis plant is a different design, but it has a similar process. All by-product coke ovens are similar in that respect, but not in design or in detail. All require the same
2623 regularity in the coke. I do not know whether the plant in the East St. Louis district uses assigned cars. I am not familiar with that. I understand that they use southern Illinois coal principally. I do not know whether the Indianapolis plant uses assigned cars or whether the Terre Haute plant does. Two of the plants that I have mentioned have no connection with us (659), only the three that I represent [are allied]. As to whether there are any other plants in the country besides those that I have mentioned, there is a plant at Boston, I think, but I am not very familiar with that operation. I think our Chicago is the largest plant, most closely connected with the gas companies. This industry is differentiated from other industries consuming coal in several particulars I have mentioned. There is one that I have not mentioned. Any public utility or any company whose prices for products are directly controlled by the situation with regard to public utilities is in the peculiar position that it is essential not only that they have a uniform supply of coal but that they must have approximately a uniform price, for this reason—the gas company's price is fixed by a State commission. It is adjusted from time to time, after long hearings running over a period of weeks. The laws governing and

ganizing those commissions are not such as to make them so flexi-
le that they can take care of sudden advances in prices, resulting
a sudden congestion, by a sudden increase in business; in other
ords, such as we had at Seaboard, when the congestion got so bad
at we paid as high as $17 a ton for bituminous coal of inferior
uality, and at that time our coke was going out at about $10 a ton.
he only way to save us was to put the price of gas very high. The
as company could not afford it and would not do it. They would
ot consider it and we would not even ask them for it. We had
o get through and take our losses until the situation improved. As
o the necessity for irregular contract price, in respect to an electric
plant, I am not as familiar with the electric business, but I
2624 think it is very important that any public utility should have a
stable situation. As to the Edison Electric Company in
Chicago, I can not answer as to whether it uses assigned cars. I
think it operates its own mines in the Illinois field. (661) It can
use Illinois coals with relatively short hauls. Their situation is
better than ours in that respect. My impression is that the Domestic
Coal Corporation at Fairmont would not need assigned cars, be-
cause they are almost in the position of the beehive oven. They
are almost adjacent to the coal mines. The farther a coke
plant is located from the coal field, and the longer the railroad haul
it has to contend with—in other words, the more transportation
problem it has—the greater the necessity for private cars. I have
not studied these plants that I am discussing and their problems.
(662) I have only studied my own and these others I have gone
over. I have stated that I felt the private cars, for people that use
constant supplies of coal, were very desirable and essential to the
best interests of the public at large. As to whether it is a practice
among the public utilities throughout the country to use assigned
cars, I know of one large utility that at a time when they were very
hard up for money felt compelled to go in and buy a number of
private cars. I do not know the general practice. The private car
used by us is somewhat of a necessary evil, an evil produced because
of the fact that the carriers did not furnish a sufficiency of trans-
portation to meet our demand. (663) For that reason we were com-
pelled to purchase private cars which, up to September 30 last,
and from the time of our buying the cars, cost us $800,000, includ-
ing the depreciation. The carriers using these cars pay us the
mileage that you get. But the amount paid is not sufficient to meet
the interest charges, maintenance charges, and depreciation. The
purpose of the cars was to supply an inadequacy of our transporta-
tion. (664) We bought them at the peak price, somewhere near
$3,000,000 for a thousand cars. That includes the interest charge
during the construction period.

2625 By Commissioner AITCHISON:

We could buy them cheaper now.

By Mr. ROPIEQUET:

I have an advantage over the other people in the use of these cars, but by purchasing those cars we helped to relieve their situation and help them as well as ourselves, but not to the extent that we helped ourselves. As to whether they have a disadvantage and must operate without the use of this necessity, they have that disadvantage. As to whether in order to get this advantage we have paid the carriers indirectly $800,000 for the period that we have used these cars, we have not paid the carriers anything. (665) The $800,000 we paid out as insurance. It has cost us that much money. The assigned car gives advantage to the largely capitalized companies as against those of less capital, to this extent. In times such as we have been going through, except for ability to raise this additional money, the Seaboard By-Product Coke Company would have gone into the hands of a receiver, or bankruptcy. That was largely during a period immediately following the war and, if not because of the war, at least followed the Federal control period. (666) As to whether that was not an abnormal period so far as transportation conditions were concerned, my impression is that the abnormal period, although not to as great an extent, still continues and will continue until the railroads are able to take care of us in times of peak loads. (667) The fact that the commission has the power to order railroads to secure cars, does not immediately produce the cars. There are other things necessary. Until the money is dug up and the cars are purchased and are actually in operation, the shortage of cars is still to be found. Until the carriers have arrived in a better position than they are to-day, we should not be
2626 deprived of our insurance. (668) I understand that during this period that I spoke of the assigned car practice was also used by the carriers. That probably accentuates the shortness of the car supply for the commercial mines during certain periods of the year, and I judge it affected our car supply. (669) Personally, I cannot see how taking the assigned car from the carrier is going to help our situation. The carriers are not in the business, as I understand it, of marketing coal. They only get the coal for their current needs, with a little reasonable storage, probably. They use, whether they assign cars or not, I would presume, only (670) sufficient cars for that purpose. If they are going to have service they must have the coal. But I am not familiar with their situation and the details of it. (671) As to my statement concerning the stabilization of the industry as the result of the private car, it is to be borne in mind that I am primarily discussing my own problems, the problems of my own companies, which companies are compelled to operate continuously.

By Mr. GREEVER (673):

All of our companies are private corporations and conduct their business for profit. We have not always done that, but we try to do it. That is what I am there for. We have found it necessary

for prosecuting our aim to make money to buy private cars. Since the purchase of those cars down to September 30, as an investment they have cost us $800,000. As to whether the advantage (674) which our business has received from the preference arising out of the use of private cars has been worth more to us than $800,000 in that period, my answer is, yes. Let me add a little to that. The Seaboard By-Products Coke Company during one of those years lost more than $800,000 in one year, prior to getting the cars. I concede that if we have a right to that preference, every other
2627 consignee would have the same right. (675) I have said that the use of these private cars has been a public benefit. Whether that would be true in case the private cars were owned by the mines instead of by the consignees would depend entirely upon circumstances. For instance, if the private cars were owned by the mines that served us and we got the benefit of it, and through us the gas company got the benefit, then those cars would be serving the public and would be of public benefit. In another way they are a public benefit—that is, because anything that helps to straighten out the industrial situation and stabilize it and put it on a proper economic basis is a public benefit. As to ownership of the private cars by the mine, under those circumstances if we were sure of the cooperation of the mines all the time and sure of the service and sure that coal would continue to be good from that mine, we would be very glad for them to take the burden.

2628 (676) As to the general good to the public, we are both pretty closely hooked together in this instance. We both have *have* to be taken care of, or I don't get along. As to whether from the standpoint I spoke of, the benefit which the public as a whole receives from private ownership of cars would be the same whether the cars were owned by the mines or by the consignees, the benefit to the public, of course, would depend somewhat on the use to which a car is put. If, for instance, it is a case where it keeps a city in gas that would otherwise be out of gas, then the benefit is of more public interest than if it were, for instance, in the case of making cologne. In respect to what I said about stabilizing the industry, I would think that the mines could stabilize the industry in the same way. It would help. (677) As to whether it makes any difference whether the private ownership is with the mines or the consignees in stabilizing the industry, I have not considered this subject from the point of view of the mines, except just now. I have not studied it. When we went into this subject, we did not find any mine or did not know any mine that would consider buying cars to help us, so I did not study it as to just how that would relieve us or how it would help the public. My impression is that it probably would help the public. Anything that relieves the congestion and the peak situation in the transportation situation will help the public, as I understand it, according to my judgment. That is the basis of my remark that private ownership of cars would help stabilize industry. I concede to every other business the same right I enjoy of buying

private cars. If they should all do that, there would be no car shortage (678) because there would be more than enough cars to go round, with what the railroads had. With respect to transportation shortage, trackage, and motive power, we do not expect any
2629 preference in that respect. My impression is that under normal conditions there are sufficient tracks and locomotives generally, by distributing the business in some way. I do not believe that the locomotive shortage or the track shortage has been a very serious matter, except in a very limited period of time, but with that I am not very familiar.

"Q. [By Mr. GREEVER.] Was not that the most serious thing last year?

"Q. (By Commissioner AITCHISON.) You take into consideration in the answer, of course, terminal congestions?

"A. I understand that, Mr. Commissioner, but I am not a railroad man. I have not studied that problem. We are satisfied, if we can have the cars, to take our chances (679) on the terminals and only our pro rata share of the terminal and locomotives, and things of that sort. We never had any preference that way."

By Mr. GREEVER:

If everybody else occupied exactly the same situation we do [with respect to private cars] I think the situation would be greatly improved generally. "In times of car shortage we would have no car shortage." I think it would be a fine idea if they would all buy their cars. It would release that much capital for the railroads to buy more locomotives and more tracks and improve the whole situation.

By Commissioner AITCHISON:

As to railroads' owned cars, they could afford pretty nearly to let them stay on the siding. What we get for the private cars is very little more than the upkeep. (680) If their own cars stood on the siding and they used ours, they would make money out of ours. They would get a return on ours. The mileage does
2630 not take care of the investment. If the railroads had to furnish the cars, as we furnish them, they could not afford to furnish them. It is cheaper for the railroads to use our cars than to buy cars. As to what the railroads will do if we put sufficient private cars in so that they do not need to use all of their cars, it seems to me the question is an impossible one if you put sufficient private cars in. There are so many people that use one car here and there, and that sort of thing, that it is not possible for everybody to buy one car or two cars.

By Commissioner POTTER (681):

If the railroads had enough cars, certainly no one would buy private cars, so there is no danger of duplication. It would take

care of itself this way. If these gentlemen here started in to buy private cars and there is, we will say, a shortage of 100,000 private cars in the country, when they get up to 100,000 the necessity of buying private cars would stop, and nobody else would buy them.

By Commissioner AITCHISON:

If there are a million coal cars owned by the railroads, and there are 50,000 private cars (682) and there is a shortage during peak loads, nobody will buy more private cars than will relieve that situation. As to what the railroads do when their own cars in a time like the present, or some other time when there is a sufficiency of transportation and cars, they place the cars on siding and do not use them. That would be what they would have to do. The carrier could meet the carrying charges on its equipment, trust obligations on those cars, and sinking fund necessary to retire them (683) by the constant revenue that he gets from us, every day in the year, all the year round, the best business he gets, at the same rate per ton that he gets on temporary business. It is very desirable business, and while I am not familiar with railroad finances,
2631 or with railroad accounting, I am convinced that any railroad, rather than lose that business, even the Norfolk & Western, would take our cars and gladly operate them, and let its own stand and find that it paid it. As to whether, when the carriers have just enough cars to meet the trade, we are, to the extent that we put private cars in and get rental from them, requiring the carrier to put on the side track the capital investment on which it gets nothing, (684) I think that that, under the circumstances, is good business for them. Otherwise I don't believe we would have been urged by the railroads that we took the matter up with to buy the cars. They were only too glad to let us buy those cars, and stated so, to give them that kind of business. I think that was good business for them. I am not familiar with their situation. The railroads told us they could handle the coal, and they thought it was a very good thing, and I got that impression right here in Washington. The man I sent reported to me that here it was thought to be a good thing. (685) As to why they urged us to buy the cars rather than provide them themselves, they could not take care of us. They could haul the cars, but they did not have the cars to serve us. As to whether they were in some way precluded from being able to buy the cars, I judge so. I do not know that because they did not tell me that.

By Commissioner POTTER:

The gist of the controversy does not at all present a situation where by any possibility the railroads can be compelled to side track their own cars. (686) As to whether the idea is to use private cars to supplement railroad cars, that was my idea, and it was the idea on which we bought the cars.

By Mr. BROWN:

We are using private cars now with the railroad's full permission. They are using them.

2632 By Commissioner AITCHISON:

I don't recall that we have ever made any efforts to get our compensation increased. As to bringing that question to the commission under the act, we have tried not to come here any more than we had to. We were willing to stand this expense, and I hesitated to come this time. I stayed away as long as I could. (687) As to whether our troubles would be very largely settled if the compensation to be paid by the carriers for the use of private cars was made sufficiently large to be fully compensatory to the private car owner, and as to whether the carriers from self-interest would then provide themselves with the equipment rather than compel us to do so, we have problems like that in our business. Occasionally, and quite frequently, our manager will come to me and say: "If you will let me spend $50,000 here, I will make you a very handsome return." I haven't the $50,000. The railroads are in that position. It is an enormous problem. I realize the railroads, even with your assistance and cooperation, can not do this thing over night. I think the time is coming when, if you feel that this private ownership of cars should be abolished (688), it can be done with much less injury to us. As to the compensation we receive from the carriers for our cars, we do not, at the price we paid for the cars, get a return such that we would care to invest in more cars. (689) From our point of view, figured as a matter of insurance, we are entirely satisfied. If I were asked to invest my money in cars for somebody else, in which I had no other interest, I would never do it at that rate of return, because I figure that the charge is not compensatory.

By Mr. GREEVER:

As to whether, if in connection with the $800,000 I referred to, the railroads had furnished the cars themselves, it would have
2633 cost them that amount of money in addition to other costs, I am not familiar with railroad accounting. I have had no experience as an operator of a railroad. My impression is that the railroads generally are permitted to earn more on their investment than we earn on those cars, viewed solely from the revenue we get back from the railroad for their use. (690) In buying these cars I feel that we are helping the railroads, that they are getting some additional revenue due to the use of these cars. They are getting the difference between our loss and what a railroad would ordinarily earn on a freight car, I judge. Therefore, in buying these cars we are helping them. (692) The items which made up the $800,000 were interest, depreciation, maintenance, and cost of supervision, and checking them off and watching them and seeing that somebody does not run away with them. Things of that sort all cost money. The public utilities we serve are served under long term contracts which were entered into for a profit. That was our only purpose at the

time. We were not under any obligation to enter into such a contract. (693) Before we went into this business we did not know the hazards of it. The hazards were not so great. As to whether we knew we had to have coal, we had not been hit by the war. We did not know what was ahead of us. We would never have made those original contracts if we had known what we were getting into. Everybody else was in more or less the same fix. (694) As to why our companies buying private cars and operated for private gain should be granted any concession not given to others, there is a reason only to the extent of where we, in order to make this private gain, assumed a public obligation. When we assumed the obligation to furnish indirectly the people of northern New Jersey with gas, then the public had an interest, and that interest had to be recog-
nized and has generally been recognized by the Government
2634 authorities. I have a responsibility there, financial and moral.

It is like my responsibility under all contracts. That is one section of the public. I don't think that the privilege which we have enjoyed and has inured to the benefit of that section of the public has created a loss to another section of the public somewhere else. As to whether it has resulted in some mines getting plenty of cars and others getting none, and in some manufacturers and householders getting no coal (695) the investment in the cars had the effect of removing that situation, improving it. Before we had the cars the Government did take other people's coal and give it to us. I don't know where they got it. But I assume it was somebody's else, because it was not ours. That was not because we produced necessities. After the war we got it in 1920. I don't know where the coal came from, but other people who would have gotten coal if we had had our private cars did not get it. We helped the other fellow in putting in these cars. The idea that all the coal mines in the United States can profit by the operation of a by-product coke plant is ridiculous. A large percentage of them furnish coal that is totally unfit to put into that service. They would not get our business if there were all the cars in the world. (696)

"A. Let us eliminate the engine and the trackage and the terminal facilities. That is not in our discussion of it, and it sort of befogs the question when you put it up to me. We are only discussing the cars, because we have all agreed on the engines.

"Q. But we are discussing, as the commissioner said awhile ago, some rule that will apply generally and in normal times.

"Director BARTEL. But he has eliminated the question of shortage of power, shortage of terminal facilities, and congestion. He said that when those things occur he is willing to take his pro rata share.

"Mr. GREEVER. That is all right."

By Mr. GREEVER:

I don't think that if everybody else is actuated by the same judgment we are and gets private cars we would have a railroad clogged

with cars and with their own cars on the siding, and have a situation of a half way public service corporation and a half way private corporation. (697) If it be assumed that $150,000,000 was put in private cars in the last three years (I do not know the amount) and if you had all your private cars, and these other gentlemen had bought their private cars, the railroads would have put that $150,000,000 into increased terminal facilities and, if need be, into increased engines, and we would all have been better off. They
2635 only have so much money. As to why railroads should not go on a private car basis and have no railroad cars, I do not think permanently that is the way to do it, but we are confronted with an emergency resulting from this war largely and from [the way the] railroad situation has been handled over a generation and we have to get out of it some way. The fact is that you want the same thing that I want. (698) The real facts are that you want something to improve the economic condition of this country and of business. You have an impression that the earnings of the coal mines you represent will be greatly improved if you can dump these private cars into the Atlantic Ocean. You are absolutely misinformed. It will not work that way. It will not do you any good unless it will do this good; in time of car shortage it will permit your mines to charge peak prices and profiteer, and you do not and we do not want that. If I were on a railroad using private cars in time of car shortage and saw my neighbor's mine using private cars and receiving one hundred per cent supply every day and I was getting none, I would sit down and figure the thing out, would analyze it very carefully, and if I found that I thought private cars would help me out (699) I would try and see if I could buy them. That is what we did. I am here advocating private cars because I think it will pay me, because I think it will protect us; that is, make it possible for us to earn money.

Q. (By Mr. BROWN). * * * Didn't you buy those private cars because you could get your coal cheaper?

A. We got our private cars in order to insure a constant uniform supply of coal, of uniform quality, and to help us—yes; it you would have as a by-product; that was not the purpose—to help us to maintain a constant approximate price.

By Mr. BROWN (700):

We made no contract with the mines before we bought the cars that we would take the product of those mines and have it delivered at our plant in cars. When we bought these cars we had contracts with very responsible large coal producers and we did
2636 not and could not get the coal. We discussed the matter at that time of making contracts with some of those particular mines. We did not make the contracts at that time, and later we did make contracts with other companies and used the private cars somewhat with that company. (701) We could not carry out those

contracts because at that time there was a shortage of cars in the country. We can make money when we get our coal at a reasonable price. The cost of coal was not our prime object in buying the private cars. It has helped to stabilize the price of coal to us, which is a vital thing in our case, but the prime object was to insure constant operation and the production of a product that we could market, regardless of price.

By Commissioner POTTER (702):

The private car does tend to reduce the price of coal.

By Mr. BROWN:

It is true of any manufacturing institution that when it closes down, because of shortage of coal or other reasons, it is an expensive proposition.

2637 (703) We bought our 1,000 cars from the Standard Steel Car Company of Pittsburgh, which built them for us. We did not get the cars on the 15th of June. We used 650 of these cars at Chicago and 350 in New Jersey. (704) The distance from the mines from which we get our coal to Kearney has varied. In the case of a contract that we recently completed, I judge it is 350 miles. As to how long it takes those cars to come up and back, I know this, that when we were going into the subject of these cars we made an analysis of the situation and found that in that case it would take from 8 days to 60 days to get from the mines to our plant, and we found that with train loading it would take about 5 or 6 days; that is, after we got the private cars we got them from the mine to our plant in 5 or 6 days, and prior to that time we were getting them all the way from 8 to 60 days. We get very good service out of our private cars, very satisfactory as an insurance. (705) As to the railroads that talked to us about this, we talked to several, one that I recall very distinctly was the Baltimore & Ohio Railroad. It so happens that the mines we get our coal from are not on that railroad. We talked of doing it but we did not do it. The Baltimore & Ohio said that they had not the car supply and that if we could furnish the cars they could give us the service through from the mines that we specified on their line. I judge that we talked to the Pennsylvania, but I do not recall that we did. We went into it very thoroughly. The Baltimore & Ohio did not sign a contract to give us service if we bought private cars, but they gave us to understand that it was perfectly safe, and we would get the service. (706) As to whether because of our ownership of private cars we should have the benefit of getting a movement in six days from our mines to Kearny that formerly took from 10 to 60 days, that depends. That is a question for the railroad to work out. It depends upon whether it is economical for them and makes them more money

2638 to do it that way and help the situation generally. It is all right.

By Director BARTEL:

Whether it takes a shorter or longer time than that for other cars, I don't know. I don't know whether we are getting preferential service or not. I am speaking about the study we made at the time before we bought them. Since then I have not been interested in the subject. We have been getting along very well and I have not figured out how well as compared with other people.

By Mr. BROWN:

As to whether the railroads have to change crews on shipments from our mines, I judge they do. (707) But that is a railroad matter and I am not familiar with it. I am not a railroad man. Whether our cars have been getting a special service or not, I do not know. (708)

Mr. FLETCHER. Representing the railroads after a fashion here, I want to say that the American Railway Association and the railroads composing that body do not understand that there is any issue here before the commission in this inquiry as to the preferential use of the power or the use of tracks or facilities in the handling of these private cars, or of railroad cars assigned for purposes of obtaining fuel. We have not undertaken to meet an issue of that kind because it is not within the scope of the order of the commission directing this investigation, and we do not think it is in issue in this case; nor do we think the commission would have a right, with all deference possible, to base a finding in any degree upon testimony in this record as to handling of these private cars after they have been loaded with coal. While I am not in a position to object to this testimony, because the witness is not my witness, I want
2639 to make it perfectly clear that the railroads are basing their case confidently upon the theory that this investigation does not go into that question at all. If there have been abuses in the direction which Mr. Brown is endeavoring to show by this witness that is a matter for the commission, if it has the jurisdiction and authority to correct them, in a proper proceeding and in a proper way (709), but this case has nothing to do with that question, and I wanted to make that perfectly clear, as to the attitude of the railroads.

Commissioner POTTER. Mr. Fletcher, we want the facts. I think that if private cars are, in fact, obtaining a better movement, we want to know it. I think Mr. Brown is proceeding along the proper line.

Mr. FLETCHER. I have no objection to your honor and the commission getting this information, just so they do not use it in any way in deciding this case.

By Mr. BROWN:

The mines with which we have contracts do not run all the time but a great deal of the time. We have had delays but they run quite constantly. The situation is very satisfactory. The mines at

the present moment from which we are getting our coal are primarily in Kentucky, for Chicago, and in West Virginia and in Virginia, for Seaboard. The cars for Seaboard are hauled and dumped at the piers at Norfolk and the coal is taken up in boats. (710) That has not been the practice ever since we have had the private cars. I judge it has been the practice for a year. At the present time that coal is the coal we want all the time. We want the coal that we are set to use all the time. We do not want changes. We do not want to have you put into us a mixture of coal, for instance, that we used last year, and year before, and this year, and all that.
2640 It will not work. (711) Such an order as the order of the commission here under protest will kill the advantage that the private car gives us. We will get virtually nothing in return for our loss of $800,000. As to whether we are entitled to 100 per cent car supply in a car shortage when the householder, the municipal gas plant and anybody else can get only 50 per cent of car supply, we are entitled to our own cars, to a constant supply of coal necessary for our industry, of that quality. We are in a peculiar situation in that respect. As explained, you can run an electric light plant on most any kind of coal. You cannot run a municipal gas plant on any kind of coal. It needs good coal. It is not my theory that because of the peculiar situation in which our companies are situated we should be excepted from any general rule made by the commission. I think the general rule that we are now operating under (712) that protects other private cars as well as ours, operates to the benefit of the public, and indirectly to the benefit of the other coal mines. I feel, if the conditions are such as to justify the expenditure, gas works, electric light works, water works, or if you please, a steel plant, ought to be permitted to help out the general situation and buy their own cars.

By Commissioner POTTER:

As to whether if we have enough cars to supply our demands 100 per cent and there is a coal shortage so that the railroad is able to give only a 50 per cent car supply, we would then have only 50 per cent; (713) that is the trouble with the order. That the order in that case prevents us from using our private cars is what I thought I made clear. (715) In the use of coal for making steam or for any other purposes, it is highly desirable that you have a clean suitable fuel, but a power plant, a steam coal proposi-
2641 tion, has much more flexibility in the kind of coal it can use than we have in a by-product coke plant. Gas plants should have a good grade of gas coal. Their requirements are not quite as important as ours. As a rule most of the gas plants use coke and anthracite. There is a great deal of coal shipped to users, particularly to small users, who have not the organization or facilities for inspection and who do not understand the importance of analysis and examination. (716) There is a great deal of coal shipped that should never be shipped. There is sold a great deal

of improperly prepared coal and coal that takes a large percentage of ash, and the little fellow is caught with that. If there is any way to stop that it ought to be done. In our properties we stop it except when we are forced to take anything that we can get. Ordinarily we get a good quality of coal. The coal mining industry is not in good shape, we all know that. We are helping to stabilize the industry to the extent of the coals that we use. In buying our coal from mines in West Virginia and Virginia we do not take from all the mines on a given branch. There are other mines right in the same region. (717) By the use of our private cars we keep our mine operating full time. The distribution to the adjoining mine is unequal, if it has not private cars or assigned railroad cars. But, for illustration, if a steel works has a by-product coke plant, and because of having that plant gets a better grade of coke, and lower cost coke, and is able to operate at times when its neighboring blast furnace, or steel works, who has no by-product coke plant, cannot operate, we should not say "let us abolish the by-product coke plants, and let us all go to the beehive basis." We have got to work in this country to efficient production. (718) We have got to get those things straightened out and make our products cheap. You cannot improve the situation by taking the corner of the industry that has been straightened out and insist that
2642 you make a mess of that as the rest of the industry is laboring under.

By Commissioner AITCHISON:

As to whether the transportation facilities ought to be given preferentially to the man who can make things cheap rather than to the man who is obliged to incur greater costs, my answer is "no." I feel that in the distribution of the railroad cars it is perfectly proper to pro rate them as you do with the railroad-owned cars now, that is pro rate them to the mines according to their rating. But in a condition where there is insufficient railroad equipment and someone is able to find the money, whether he is little or big, and to take the risk and go in and help out that general situation and stabilize it by using that coal continuously, I feel that he should be permitted to do it. (719) The pertinency of my statement concerning a cheaper basis of production in this country is that if some private individual is willing to come in and help out a situation, that helps everybody, and incidentally happens to help him more than other people, he should be permitted to do it, as long as that does not hurt somebody else. That leads to a cheaper basis of production. (720) This transportation situation is costing this country many millions. It has put up the cost of everything. It is not my position that because we are able with our organization, etc., to provide things more cheaply than others, we are for that reason entitled to consideration in the way of car supply which others do not get.

By Mr. BROWN:

Some of the 350 cars that we own and use for the New Jersey plant are sent down south and there used. On one road we do not need them to-day. Some of those cars are probably standing idle at Seaboard and we are not getting any mileage on them if
2643 that is true. Our cars are run from mines in West Virginia to tidewater. (721) I think the Chesapeake & Ohio is the railroad. It is the Gulf Coal Company mine. I haven't information as to its location. The mine in Virginia is the Stonega Coal & Coke Company on the Interstate Railroad. We are not using our cars there. (722) I don't think that the C. & O. uses any system cars to get our coal from our mine down to tidewater. The 350 cars are sufficient to haul all the coal from that mine. We get the coal for the Chciago plant from two operations, one in Harlan County and the other in Pike County, Kentucky. We take the output of those mines. The 650 car are sufficient to haul that traffic. We do not use any system cars. (723) There are objections to making contracts with a larger number of mines at the point of origin. The same seam coal is not always the same quality of coal. Another thing, some mines prepare coal well and some do not. There is a vast difference in coal from the same seam. As to providing in our contract for preparation of the coal, you can increase the cost of inspection but you can not prepare good coal from a mine that has not got good coal. I have given an illustration that we have just gone through with where with coal from the same seam, in one instance we needed 33 per cent and the other 50 per cent to make coke of the proper structure, showing that the seam does not hold good.

By Commissioner POTTER:

As to whether if we placed our order at 20 mines instead of one mine and the car supply was reduced to 50 per cent that would reduce our coal just the same as though we placed our orders at one mine, (724) it would reduce our coal and greatly increase our trouble and expense. You would get all kinds of coal. You can not get from 20 different mines a uniform quality of coal. It is impossible. We can not overcome the effects of a car shortage simply by in-
2644 creasing the number of our mines, unless we contract for 200 per cent supply. If you own your mine yourself and are able to double the equipment that you need, you would get a double rating.

By Mr. BROWN:

As to whether if we had 20 contracts in a given district there would be one working full time and 19 working quarter time, it is not my understanding in running an industry that you must so conduct it as to protect another industry that is economically not in a good position. When we take coal from your 20 mines I have repeatedly stated that is is a physical impossibility to secure a uniform quality of coal. (725) I have a very decided interest in the coal industry. When you help a part of that coal industry as we are

doing, that industry helps the whole. As to how, out of all the mines in Virginia and West Virginia, the two mines we keep operating full time, help the coal situation, it certainly does not hurt the other mines. That coal would not necessarily be mined if I did not need it.

2645 By Mr. Boyd (726):

I have referred to the movement of coal from eastern Kentucky mines to our plant at Chicago. Our company or a subsidiary of our company operates one property in eastern Kentucky. It is the Melcroft Coal Company. They have two openings. Both mines are supplied with privately-owned cars. They have been used in that service, I judge, a year and a half to two years, probably two years. (727) We acquired the Melcroft Coal Company property a little over two years ago. We operated those mines for a period as I recall it without the use of privately owned cars. The service was unsatisfactory. Since we have been using our private cars, the service generally has been satisfactory except at a period, especially last year, when there was a shortage of locomotives or some breakdown other than cars. I can only approximate how long a period that was. I suppose a month or so but really I do not know. Generally we do not dispose of any of the output of the Melcroft Coal Company mines commercially. We do so only in times for instance such as this when, if we temporarily go wrong with the plant, we may ship that coal to somebody else. (728) I suppose we would use our privately owned cars in that service, if they happened to be there, but when we get into that position, we are put on a rating basis whether we have our cars or somebody else's. I think that occurred. I do not know how much we are paid for the use of our private cars by the railroads. It is a mileage. As to the turn-around on these cars from the mines at Coxton and Kayu from the Melcroft Coal Company to Chicago and return, I have forgotten the detail of it. The round trip would take, I judge, probably two weeks or
2646 a little over, but I am not sure of that. That is under normal conditions. Of course, during the period that a railroad was in bad shape it took much longer than that. (729)

By Mr. Greever:

I think in time of car shortage our contribution of privately owned cars helps the public and the railroads. That would be true whether those cars were distributed generally or only at our mine. The cost of maintaining these private cars is quite large—"Expense and repairs," total for the period, approximately $143,000. I don't know what "expense" means in this item. (730) It probably includes the expense I referred to of looking after our cars. $532,000 of the $800,000 is charged to depreciation. The interest on our investment completes the $800,000. We have been taking coal from the Gulf Coal Company since the first of April, probably,

or before that. I do not remember the date of that arrangement. I think we get the total output from one mine. I do not know that.

By Mr. CURRY: (731)

My recollection is we bought those cars in June, 1920, with the promise of early delivery on some of them, but we got them beginning in the latter part of that year, going into the next year. At the time those cars were delivered to us, in the latter part of 1920 and the early part of 1921, the Seaboard By-Products Coke Corporation and the Chicago By-Products Coke Corporation did not have contracts with the same mines with which it has contracts now. (732) In 1920 our Chicago plant had not started to operate. We were building it and it did not operate until the latter part of 1921.

Almost all of the Seaboard coal was then coming, according
2646a to my recollection, from western Pennsylvania. Those were entire-output contracts. One I remember very distinctly. My recollection is that it ran for a year. It might have been two years. That mine was not owned by an affiliated company. We had no interest in it. We own no mines except the one through an affiliated company that I described. That only furnishes part of the coal for Chicago. We do not mine any of the coal used at Seaboard. In the beginning we had no private cars. (733) Our contracts were then all in Pennsylvania. Then, after we got the private cars, we bought our coal in Pennsylvania and the cars were used, 100 per cent supply, to different mines. We have bought some little coal there during the last year, and I think our contract expired the first of last April for the entire output of the mine. Those mines in Pennsylvania were located on the Pennsylvania Railroad. I do not think our cars gave them quite all that they wanted to do. My recollection is that they wanted to mine more coal, but we could not do it because we could not take it away. (734) My recollection is that at that time our entire requirements for our Seaboard plant came through our cars. It was certainly true of high-volatile coal, but we have changed our practice somewhat recently. We use more low-volatile coal that we did then. If you used all high-volatile coal at that time, it means virtually an average of 85 per cent of all the coal requirements. It is possible that all of it came in our cars. During the time when we had these contracts in Pennsylvania and were using our private cars practically 100 per cent, there were car shortages. I remember very distinctly part of last year there was a very serious car shortage, and the private cars served a very good purpose and helped us enormously. As to when
2647 that period was, for quite a while most of the cars were stored in our yard at Seaboard, and they were not in use at all during the worst of the period of the coal strike and the railroad situation. During that time we brought in from England something over 100,000 tons of British coal. When the railroads got into operation again and the coal mines got into operation, we used our cars to

very good purpose at that time. (735) Before the end of the strike we had nothing to haul in them. We could not get any coal in this country and we got British coal.

By Commissioner AITCHISON:

As to whether I remember when the commission put out a notice that the use of assigned cars was contrary to the spirit of the service orders and the carriers quit using assigned cars in 1922, I don't remember that, but I have not followed this in very close detail.

By Mr. CURRY:

After this critical period or the worst period our coal then began to move in private cars and they proved satisfactory.

By Commissioner AITCHISON:

This period when our cars were on the side track was when our mines were idle.

By Mr. CURRY (736):

When we began to use our private cars to advantage, I judge there was a car shortage. As I recollect there was a serious car shortage. There was a great demand for fuel and that seemed to let up along the early part of the following year. During that fall and perhaps during the winter there was a shortage of equipment and our cars came in very well to help out and serve the purpose for which
2648 they were bought. During that period, I think, there were other mines in the immediate district of the mines which we served, which were on a commercial percentage and receiving less than our mines. As far as I recollect it, there was not in that period a locomotive shortage in that district. If there was, we would suffer with the rest. (737) If it be supposed that there are two 40-car mines, one a private car mine and the other a commercial mine and as a result of a railroad strike or something of that sort the railroad is short of motive power so it can place only 50 cars a day at those two mines together, although there are sufficient private cars and commercial cars standing on the sidings to furnish each mine 100 per cent if motive power were available, (738) it is my understanding we would each get 25 cars. Under my theory and what I am claiming here, if there is a motive power shortage we are not asking for the benefit of the assigned car rule but are willing to come in and prorate the equipment with everybody else.

By Commissioner AITCHISON:

As to whether that statement is also true when the trouble is the fact that the mines are perhaps overdeveloped along a line of track or where the track is so crooked or has so many grades, lack of passing tracks, that is my understanding. That is also my understanding when the railroad has congested terminals or its connecting lines are unable to receive or deliver and hence are the cause of the slowing up. In such cases all I ask is our pro rata according to commercial rating. (739)

By Mr. CURRY:

As to whether during last winter a shortage of motive
2649 power was the principal trouble on the Pennsylvania Railroad, my memory is not very clear of the Pennsylvania. On the Louisville & Nashville, I know there was a serious hold-up there. It was motive power. I think we had that same trouble with our coal from western Pennsylvania last year. We did not, during that motive-power shortage, on the Pennsylvania get 100 per cent of our private cars. That period, I think, was after the shopmen's strike. The cars were up there but they were not billed out. (740) As to what I would suggest as a workable rule to be able to tell just when there is motive power shortage or just when there is tract facility shortage or when there is congestion on the originating line or congestion on the connecting line that would make the assigned car rule, as it has heretofore been applied, not applicable to private car mines, that is a problem in railroading and in supervision that I have never thought of, but it seems to me, as a business proposition, it could be worked out perfectly so that there would be no danger of being unfair to anybody. I am not a railroad operator.

"Q. (By Commissioner AITCHISON.) Well, Mr. Rust, there is no desire, of course, to get you into a position where your words have a double meaning or anything of that sort; but a car shortage does not always mean, in common parlance, as I understand it, at least, that there are not enough cars: It means more than the car is not at the time and place where it is wanted. That may be due to a good many causes, such as some of those that Mr. Curry and I mentioned a few minutes ago. Now, did you have that in mind when you were discussing what your rights were with respect to distribution in time of car shortage?

"A. I think I did."

By Commissioner AITCHISON:

I do not think that owning private cars was the thing that would solve all transportation problems for us. (741) I know it has not in the past and it won't in the future. It simply helps us very materially in times of peak load when there is actual shortage.

By Mr. CURRY (745):

With respect to the mines on the Louisville & Nashville in Kentucky, there was a very serious situation there last year which I think included both the locomotive and the terminal difficul-
2650 ties. I think it would be fair to say that there was a shortage of locomotive and track facilities as distinguished from a shortage of cars. During that period our mines were not able to enjoy the advantage of the private cars we purchased. That is in accordance with my understanding of the way it ought to be worked out. Where our private cars are concerned our contracts are gen-

erally output contracts. (746) We are taking coal now down in Virginia and it comes out on the Norfolk & Western Railroad. I judge it is a partial output contract. As to whether it is practicable at least there to make a partial output contract, "well especially at this time." If it be supposed that we take the entire output of a ten-car capacity mine and there is a 50 per cent car supply, our private cars are of great advantage to us in that we can keep that ten-car mine running. As to whether it would be practicable instead of buying the entire output from that one mine to make a contract, say, for five cars from that mine and five cars from an adjoining mine operating a seam like the seam of the first mine, a ten-car mine is a size that we do not like to deal with. As to taking a 50-car mine [instead of a ten-car mine], (747) when you divide into separate mines, you get different qualities of coal, almost invariably, and that is the thing we are trying to avoid. We try to simplify our operation as much as possible. If we have this arrangement by which we contract for five cars from each of these ten-car mines and those mines are willing to contract to that extent, we would not get our full supply in case of commercial shortage down to 50 per cent, because that mine would go out and sell its full ten cars during times like this, if it could, and then when times became difficult and they could only produce five cars, we would get two and a half and the other fellow would get two and a half. That would not help us at
2651 all. We would not get the coal. As to whether if the ten-car mine is willing to contract for five cars for us, expecting to sell the other five cars as spot coal and there is a 50 per cent shortage, our contract (748) would stand if you could hold it, but with a ten-car mine, nine chances to one he would sell the other five spot and let you whistle.

By Commissioner AITCHISON:

That would be true, although you had a contract. You can not take everything into court. It takes too long and costs too much. Those things actually happen.

By Mr. CURRY:

If that contract were carried out in the theoretical case given, that would take care of us. As to testimony about railroad fuel something like that, I was not present and am not familiar with the situation.

By Mr. GREEVER (752):

As to whether the situation I am looking for is where there is 100 per cent motive power and 50 per cent car supply, my answer is "yes." That is where we shine.

Redirected examination by Mr. GUTHEIM:

As to whether when motive power is short, terminals congested, and receiving lines unable to take the cars (753) and you have tortuous railroads and exceedingly heavy grades, it is my experience in

competing with fuel oil, bee-hive coke, and anthracite coal that those commodities are still able to make deliveries as in other periods over the same line of railroad, I do not know that I have [had this experience]. My impression was that even in the anthracite
2652 region they were not able to haul all their cars last year when they first started up there, but I am not sure. I do not know what the situation was in the bee-hive coke region at that time.

DUDLEY FARRAND, (754) recalled as a witness, testified further as follows:

Direct examination by Mr. CARMALT:

I am vice president of the Public Service Electric Company, one of the petitioners in this case. The Public Service Electric Company furnishes electric current for light, heat, and power for a very large area for about 80 odd per cent of the population of New Jersey. It supplies all the principal towns with the exception of Atlantic City, some 202 municipalities in number. It supplies a very large amount of street railway power and power for other utilities such as telephone and telegraph. (755) It supplies a very large number of public buildings, both municipal, State and Federal and also supplies some power to the gas company, one of our sister companies. It furnishes power for the operation of the State railways in 146 or 147 municipalities. As to the means those communities have for obtaining electricity, there may be incidentally, industries in these towns that have their own power but those depending on us have no other means, broadly speaking. The rates for the product of the Public Service Electric Company are under the supervision of the Public Utilities Commission of New Jersey and have been for about 12 years. Its principal electric plants are scattered throughout the State from Paterson, Jersey City, Newark, Perth Amboy, Trenton, Burlington, and Camden, with a number of minor plants in smaller places. In all modern plants the engines are turbines. (756) In the modern turbine station fuel
2653 averages above 80 per cent of the production cost, generating cost. Since the last hearing our company has entered into a contract for the supply of fuel. The contract is dated April 20, 1923, and covers a million tons a year for a period of ten years, the beginning date of the contract being the coal year. The contract has a 10 per cent leeway. It will take care of about 90 per cent of our estimated requirements for this year. The contract takes the entire output of, I think, seven mines in Cambria County, Pennsylvania. The quality of coal is covered by detailed analytical specifications in the contract, failing to comply with which we have the right to cancel. (757) It is very important with us that we have a uniform supply of coal in quality as well as quantity. We bought private cars in 1920 after negotiations here but they were rather slow coming in. There were a few delivered at the end of that year but most of them were delivered after the first of the year, scatter-

ing along from January 1st to April 1st. In the figures I have showing car operation, we have assumed April 1, 1921, as the average date. The statement showing such operation is from the best information obtainable in the company's files and has been prepared under my direction.

(The document referred to was offered and received in evidence as Exhibit No. R–12.) (758)

The electric company has approximately just under half a million customers. Our gas company has over a half million and our railway company carries something over a million passengers a day, the exact figures I have not with me. We have thousands of manufacturing industries absolutely dependent on our power. In sup-
2654 plying the municipalities we in every case supply hospitals and schools, public institutions and so forth in such municipalities. Geographically the operation of our plants covers less than half of the State of New Jersey but as a matter of population something over 80 per cent. (759) The investment in our 600 cars is shown to be $1,750,297.97. The average cost per ton that it has cost the company to operate those cars was 32.1 cents in 1921, of which we have nine months' record. In 1922 due to a combination of conditions it was 61 cents. This year, seven months up to July 31st, inclusive, it was 21.8 cents. That is the net cost after taking our total cost and deducting the mileage allowance as per schedule. There has not to my knowledge been any preferential movement of our private cars. There isn't any such thing. We have coal in both kinds of cars, system and private. There might be something by reason of easier handling, if we should happen to have a trainload that will be easier to handle than a bunch of six or seven, but that is simply incidental to the handling. It is not deliberately preferential and there is no arrangement for preference to my knowledge. (760) Whether there is a car shortage or any other thing, in our own terminal we have our own locomotives and the cars are taken from the railroad in bulk and handed back in bulk. Our plants at Jersey City and Newark happen to be reached either by rail or water but we have in many instances helped out the rail shipper by having the car delivered at the water and the coal transshipped at South Amboy into boats. It means a saving of three days in the trip of the car from the mine back and forth. We have done that repeatedly in times of shortage to help out. That is done to help out the railroads and at some advanced cost to ourselves.

By Director BARTEL:

2655 The placement of railroad cars at the same mines where we place our private cars is due to unusual and erratic conditions. Normally, now that we have our cars and have complete output, we try to have those cars placed and loaded to take the output of the mines (761), but the experience of the past two or three years has made us take what we could get in many instances. That is one of the exigencies of the service.

By Mr. BROWN:

Right now coal is coming in our private cars and none of it in system cars to my knowledge. Under this present contract one of the considerations is the use of these cars, and that has been working out. Prior to that we had various contracts.

Cross-examination by Mr. ROPIEQUET (762):

Our contract provides basically for a million tons, with the option to take the entire output, as our business grows, the only reservation being a very small electric plant there on the adjoining property of one of the mines. The contract does not provide that we are to take the entire output of the mine. We are taking the entire output. It provides for the furnishing of our cars for that which is taken irrespective of whether we are taking the whole output of the mine or not. We do not sell any of this coal that we get. (763) The coal we take is run of mine. (764)

By Mr. CURRY:

If it be assumed that there are two 40-car capacity mines on a railroad, one a private-car mine and the other an unassigned-car mine, and there are sufficient private cars and system cars to furnish the private-car mine 100 per cent and the unassigned mine 100 per cent, but the motive power is only sufficient to place 50 cars
2656 for the two mines together, the cars would be assigned just as if everything was normal, but when it comes to the handling the railroad would handle them only in proportion to their power capacity; if it was five-eighths, it would be five-eighths, and that is all we have ever claimed. (765) There is a great deal of confusion about this thing. We are not talking motive power. We are talking cars and our position in private cars is simply to relieve car shortage. We have not argued at any time motive power. We take what we get. As to whether we would get 25 cars and the other mine would get 25 cars, that is my understanding. (766) As to whether we are asking that the assigned-car rule be applied where there is a shortage of motive power, I never heard any reference to motive power in the assigned-car rule. All we ask is to use our own cars, and we took up with the commission and received consent to do so before we bought them. We do not ask for any special consideration in motive power and are not asking for any preferential placement of those cars at the mines if there is a shortage of motive power.

Mr. CARMALT. It is a fact that at the earlier hearing I entered an objection to this line of questioning concerning the distribution of motive power, as not being a matter that is pertinent to this inquiry. Mr. Farrand has not come here as a transportation expert. We have taken the position throughout this proceeding that we had no desire to absorb any more than our proportion of motive power or other facilities. But there is absolutely nothing on this record

upon which to base a proper distribution of motive power.
2657 (767) There is testimony on this record that is very convincing to the effect that one can not measure motive power distribution in car units, and I therefore object to the questions that are now being put to this witness, both on account of the lack of backing for the question in the testimony, because it is beyond the scope of this inquiry, and also because this witness has not been put on here as a transportation expert, and has not qualified as such.

Director BARTEL. Your objection will be noted.

By Mr. CURRY:

As to whether there should be pro rata distribution of cars to our mine and the other mine, in case the tracks were limited so that only a limited number of cars could be moved, we do the same thing when there is motive power supply as when there is not. We send our cars to the mines. Whether they get there or not is a matter of railroad operation, which we do not control, nor do we specify the percentage of motive power we are to get.

By Director BARTEL:

As to whether it is a correct statement of my view to say that, assuming that there is a shortage of railroad cars and no shortage of power or of (768) track facilities, and no other railroad disability, we are entitled to have our cars placed at our mine 100 per cent and have the railroad cars prorated among the commercial mines that are using railroad cars, that is it exactly. We do not confuse the two at all. There was no question of motive power until the shop strike of last year, which made it acute. That matter had not been serious for years except in local instances. If a bridge goes down, it makes a very serious situation locally, but the whole United States railroad situation is not under review
2658 because of that local thing. The shop strike was quite general and it was very acute in a good many places, but I do not understand that to be what brings up this thing.

By Mr. CURRY (769):

The mines with which we have these contracts are located in Cambria County, all on the Pennsylvania. Our cars have been assigned to the mine during the past year to the full extent of the requirements of the mine, with provision for stocking. Our contract is made to suit our requirements, and the cars are sent in to meet those particular quantities. It happens to be the output of the mines. It is a maximum and a minimum contract; 10 per cent spread. We take the output of the certain mines from which we are getting the coal, but the provision in the contract is to throw in additional mines as our business grows; but in each case we get the 100 per cent output. (770) And if there is a car shortage, we have 100 per cent cars placed there at our mine. That is our business, to send the cars in. Whether they get out or not is the railroad's business.

Q. (By Mr. CURRY.) You have bought these cars in order that you may guarantee this regular flow of traffic from that mine?

A. We bought them by and with the consent of the commission, as we understand the negotiations.

Q. Your position is that the commission is estopped from changing that rule, is it?

Mr. SPEER. I would like to make this objection. I have entered my appearance here. I appear for this company. We think this question is improperly addressed to this witness. It is a legal question, and if the gentleman desires to have it answered, I am prepared to answer that question, but I do not think it ought to be asked of the witness. We think the commission is morally estopped, but legally it is not, of course.

2659 Director BARTEL. The witness testified that he has got permission from the commission to use these cars.

Mr. SPEER. He has.

Director BARTEL. I do not think he has. I do not think the letter gave him any permission whatsoever.

Mr. SPEER. We think it did. That is what we purpose to argue when the time comes. (771)

Director BARTEL. The witness has testified to that, and I think it is proper to ask questions with regard to it.

Mr. SPEER. Your honor overrules my objection?

Director BARTEL. I do.

Mr. SPEER. Your honor will allow me a special exception on the record for that?

Director BARTEL. It will be noted.

Mr. CARMALT. May I suggest that this question was gone into fully at the last hearing under Mr. Commissioner Aitchison's examination of this witness, and it seems to me to be merely a duplication.

Director BARTEL. I think so myself. This has all been gone into.

Mr. CURRY. I will withdraw the question, Mr. Director.

By Mr. CURRY:

As to the seven mines with which we have our contract, we have had a full car supply by virtue of our private cars at those mines, since conditions settled after last year's disturbance. (772) I can not fix the date when that was last year. There were so many ups and downs, with the coal strike and the shop strike, and the importation of coal. We brought in somewhere between 50,000 and 75,000 tons of coal, and we bought all sort of spot lots at different places. With our own cars we got a full car supply from the time we got settled conditions, with possibly local difficulties, but no general

2660 difficulties. As to whether there was a regular car shortage during that period, my recollection is that there were lots of cars that could not be hauled on account of motive power shortage, some of our own. (773) I know that during that time of so-called motive-power shortage our mines did not receive our private cars in full while other mines were not receiving full car supply. As to

whether at such a time of motive-power shortage, our cars and the cars of others would have to go on the pro rata basis, I have already said that. I believe that to be so.

By Director BARTEL (774):

As to whether the conditions last year were abnormal, they were absolutely, and nobody can predicate anything, past or future, on last year. The shop strike was the most abnormal thing about it.

By Mr. BROWN:

The coal we bring in is steam coal. As to whether we have the same difficulty as the witness who preceded me in getting coal that we can use, we have, but not within the petition. The petition is in the name of our electric company, which is a steam coal proposition. We have the same business as Mr. Rust spoke of. We have a very large gas business. (775) We take all Mr. Rust's gas made in New Jersey, in addition to which we have a coke plant of our own, but that is not official in this case. With respect to the one million tons, it is for steam purposes. With respect to making contracts over a wider field, the requirements are not as rigid as in the gas business, but they are reasonably rigid, and must be kept within certain lines. It is not wide open, and you can not use every kind of coal and produce the results. As to whether we make our contracts with a smaller number of mines for the reason that we can take a contract to cover a period of ten years and get our coal cheaper, that
2661 is incidental. We make a contract with a concern which is able to supply and does supply a quality of coal suitable, but at a price which we think is favorable. Whether it is one mine or twenty-seven is a matter of local concern. (776) Other industries or plants do not do the same thing. There are lots of concerns, as Mr. Rust says, that do not have the facilities for analyzing and knowing what they get, that take all sorts of cats and dogs.

By Mr. HIGGINS:

With respect to Exhibit No. R–12, the loss per ton of coal handled in private cars shown thereon has nothing whatever to do with the market. It is the net dollars loss divided by the number of tons handled. Whatever the loss is will continue. Whenever we get normal, it will probably be those figures, but it will still be an expense. That is our cost of insurance of the car supply. (777) There is no straight year in this whole business. The calendar year of 1922 was straight, but conditions were upset. This year is only seven months, and our coal contract did not start until April. Whether we get our coal in solid trains or not is a matter of railroad operation. Our coal is started out from the mines according to our current requirements, and the railroads handle it in their own way. Our daily requirements are roughly 3,500 tons a day. (778) I could not tell about the little local details as to the cars from each mine. The reason we have these private cars is to insure cars in which we may receive coal. With respect to storage,

testified at a previous hearing that we have gone way beyond the ordinary concerns in our line of business to provide storage. We did that and everything known to the trade, and then were forced to buy these cars because we could not keep going economically. As to the storage we now carry, I have not the figures in my head, but it is well over 60 days. We are building up for our winter coal.

2662 By Director BARTEL:

As to increasing our storage, we have bought three pieces of property since I testified before (779), but whether they are actually in use to-day, or not yet ready, I am not able to answer.

By Mr. HIGGINS:

As to storing in anticipation of an unusual condition such as a strike of railroad men or miners, it is a matter of guesswork as to how long the strike is. Our normal storage is about 90 days. I mean the capacity of storage, which is as high as it is considered wise to go. Beyond that we would have to secure extra land, and store it elsewhere, but that is a very expensive proposition. It is not only expensive in the matter of investment but expensive in handling. As to whether, summing up our position, we are looking out for our own property investment and not taking into consideration the investment of those who are not so favorably situated, I would not put it on that basis at all. We realize our responsibility, and when you have millions of customers which you are obligated to supply, the only reason that we go to this expense is to insure service.

By Mr. CARMALT (780):

We are contemplating an enlargement of the electric operations. Our business is growing to a very healthy condition. We have one brand-new superpower plant just started, and we are building additions on practically all the others at more or less expense. In two cases it is approximately 50 per cent of the present capacity in addition. These plants require an output to serve the municipalities that is about equal from day to day normally except the seasonal difference.

By Mr. CURRY:

2663 I should say 90 per cent of our coal requirements is taken care of in our private cars under normal conditions, but as to 1920 or 1922 it is anybody's guess until you figure it out. (781)

S. PEMBERTON HUTCHINSON, called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. GUTHEIM:

I am president of the Westmoreland Coal Company and have my office in Philadelphia. We are miners and sellers of gas coal. Our mines are located in the vicinity of Irwin, Pa., on the main line of the Pennsylvania Railroad, about 20 miles east of Pittsburgh, in

Westmoreland County. (782) The names of the mines are Export, McCullough, Biddle, Penn, Adams, Criterion, Marchand, Magee, South Side, Yough, and Denmark, all on the Pennsylvania Railroad. We use private cars owned by our company at all of the mines except at Denmark and at Biddle, and perhaps there to a very small extent. Those private cars I should say, in the transportation of our coal to market, move over nearly all railroads operating east of Pittsburgh and north of Washington. For the year 1921 there were 1,359,340 tons of coal loaded at our mines and shipped by us in private cars; (783) in 1922, 1,303,195; in 1923 to September, 1,333,199. During these three years we did not load any of our private cars at any mines other than our own. In 1921 we loaded 901,070 tons of coal produced at our own mines in cars other than our own; in 1922, 732,215 tons in such cars; and for the first nine months of 1923, 802,752 tons in such cars. That was not all in railroad-owned cars. I can not say how much exactly, but there was a small proportion in other private cars, coal that we sold to the owners of other private cars. (784) Referring to our shipments in 1921 in private cars, railroad fuel amounted to 174,450 tons; no bunker
2664 coal; public utilities, including by-product coke plants, 734,631; other by-product coke plants, none; all other industries, 450,259. The same classification for the 1922 tonnage was: Railroad fuel, 180,650; no bunkers; public utilities, by-product coke plants, 585,968; other by-product coke plants, none; all other industries, 536,577. The 1923 figures for the nine months period are: Railroad fuel, 23,000; bunkers, 833 tons only; public utilities by-product coke plants, 673,919; other by-product coke plants, none; all other industries, 635,417. (785) Classifying the same tonnage shipped in our private cars for these three-year periods, in 1921 there were shipped on term contracts—and that is practically all one-year contracts—1,286,815 tons; other contracts and spot sales, 72,525; 1922, term contracts, 1,157,199; other contracts and spot sales, 145,996; 1923, term contracts 1,267,304; other contracts and spot sales, 65,895. We mine and sell a high-grade gas coal very light in sulphur, low in ash, high in volatile matter, and very high in fusing temperature of the ash. Our principal market for our gas works is northern New York and in New England—that is, as far as gas works go. We also ship to a number of steel plants who use the same coal for their purposes—smelting, I believe—. At the northern end of our field the coal has always been rather too high in sulphur to suit the gas trade, and the product of those mines is sold largely (786) to the Pennsylvania Railroad for locomotive fuel. Our company has been an owner of private cars for a great many years. We find, after searching our minutes, that on December 26, 1855, the company owned 24 road cars. Just what they did with those road cars history does not tell us. January 2, 1861, we find: "Reliable provision for an enlarged business could be made by this company furnishing their own cars, and hopes are entertained that such an arrangement may be per-

fected with the railroad company as will warrant those inter-
2665 ested in this company in furnishing the requisite capital for the purpose." On January 2 of the same year it was "Resolved, that the incoming board of directors are hereby requested to consider the propriety of this company purchasing coal cars, and to lay such information on the subject as they may obtain before the stockholders at a subsequent meeting." (787) May 15, 1861: "The employment of the rolling stock of the Pennsylvania Railroad Company for transportation of troops and supplies for the U. S. Government, as well as the increased traffic thrown on it by the interruption of trade over the Baltimore & Ohio Railroad, have caused serious embarrassment to our business the past six weeks and caused application to be made to the officers of the Pennsylvania Railroad Company, from the Pennsylvania Gas Coal Company and our own, to furnish cars for the transportation of our coal, they at all times furnishing motive power for the same." They gave us permission to build 140 cars, "the railroad company to furnish motive power at all times for the prompt transport of the cars and to allow a drawback for their use, sixty cents per ton from the rates now paid from the mines to Philadelphia." I regret that that last arrangement has been abrogated many years ago. In pursuance of the action of the board, in 1861 they made a contract for 200 cars, capacity 22,500 pounds each, cost complete, $413.44. (788) The statement I have correctly describes the private coal cars as presently owned by our company in so far as the date purchased, the number purchased, the original cost, marked capacity, and the material of which constructed.

(The paper referred to was offered and received in evidence as Exhibit No. R–13.)

I have a statement which correctly sets forth the financial results of our car operations for 1921, 1922, and 1923 to September 30.

2666 (The statement referred to was offered and received in evidence as Exhibit No. R–14.)

By Commissioner ATTCHISON: (790)

We own to-day 2,019 cars. This statement does not include any cars that were purchased and retired. We have no cars left that were purchased prior to 1900. Some that we have purchased since 1900 have been destroyed in wrecks, etc., but 2,019 represents the number of cars that we have to-day in service. Some of them perhaps are going through the shops. The figure of $2,000,000-plus is the original cost of the identical cars as shown here.

By Mr. GUTHEIM:

Referring to Exhibit R–14 with respect to the financial result of our car operations, (791) in 1921 our loss per ton handled was 18.88 cents; in 1922, 13.4 cents; and up to the first of October this year, 8.5 cents. I have been president of the Westmoreland Coal Company somewhat over 13 years. Prior to that time I served only as

a director. During this period I have lived close to the transportation situation. It takes most of my time. With respect to the motive-power situation in 1922 on the railroads serving us, I do not think there was ever as great a shortage of motive power as during that time. With respect to priority orders during the time of the Fuel Administration we had priority orders imposed upon us.
2667 (792) In 1920 I recall we were esubjected to priority orders to ship to Lake Erie ports, but as most of our coal was on contract to the railroads and to public utilities and to steel mills, we did not have much of that situation. Compliance with those priority orders naturally took away from the trade to which we would ship on contract otherwise.

By Commissioner AITCHISON: (794)

I believe that service order No. 10 was agreed to by some people in the coal trade, but I am very certain it was not agreed to by everybody.

Cross examination by Mr. BROWN:

I believe the ownership of our private cars is a good thing for us. I do not know that it is a particularly good thing for us. It is a very good thing for people who must have a supply of high-grade coal regularly. If we did not have these private cars, I do not think we would sell as much coal because we could not undertake to deliver as much. (795) Our contracts are so fixed that these ten mines we have are operated to their reasonably full capacity. The report of the United States Coal Commission shows that we have the smallest labor turnover in any nonunion district. There is only one other company, strictly speaking, in the Westmoreland district that caters to the trade that we do. That company, the Ocean Coal Company, has private cars, too. There are other coal operators in that same region who have no private cars. (796) They do not furnish the same grade of coal. The coal that the other operators furnish is mostly what is called "crop." It is discolored, high in sulphur, and does not enter into the trade that the Ocean Coal Company and ourselves cater to. We use system cars in our shipments of coal to the Pennsylvania Railroad. They furnish their own equipment where we are selling them fuel.
2668 The Pennsylvania takes the full output of the mine. None of that coal is sold commercially.

By Mr. BOYD (797):

None of our cars is used in shuttle movement from mines to by-product or gas plants. There are no gas plants or by-product plants near Irwin. The principal market for gas works for our coal is northern New York and New England. We do not ship any coal into Pittsburgh except some little for domestic purposes. There is a very wide distribution of our privately owned cars. We find that our cars are loaded by the railroads with other material in the direction of the mines. It was not the rule. We sometimes

ee our cars coming west loaded, we will say, with brick or sand or a short distance. We, of course, protest whenever we find it ut. We get tired doing it sometimes. That is not permitted under ar service rules. Privately owned cars are supposed to be returned o the owner, to the mine, by the most direct route, or at least by he route by which they came loaded. (798) As to whether when hey have been misused, so to speak, the railroads change the compensation to us for the use of the cars, they do not change it a bit.

By Mr. BROWN:

We use our private cars all the time.

By Mr. CURRY:

The use of these private cars resulted in something of a loss to our company. We are willing to suffer that loss because of certain advantages that inure to us. (799) With respect to the last three years we have not been able to secure full operation of our mines. Even with our private cars we have had periods of car shortage. Generally speaking, our private cars have enabled us to operate more regularly or for a longer time than mines in
2669 the same districts which did not have private cars. It has given us an advantage. It is greatly to the advantage of our mine and our men. They get more steady work. The mines are able to operate more regularly. Our district, the Westmoreland, is rather peculiar. It is a small district and has a number of small companies and a number of individuals who have a little outcrop of coal or a little coal left over from an abandoned mine, and their rating in some cases does not exceed one car a day. (800) We are on the Pittsburgh division of the Pennsylvania. Our mine is about 20 miles east of Pittsburg. I have a statement here which was voluntarily furnished by the railroad, and for the year 1920 it shows bituminous coal car distribution. In the month of February, 1920, it was 4.3. That is the whole Pennsylvania Railroad east of Pittsburgh and not merely our district. (801) I would not like to say positively what the percentage in our district was during most of the year 1920, it varied so much on account of the irregularities of the movement. Some days it was 50 and some days it was a little more and some days it was less. Some days the commercial supply was down as low as 2 per cent and some days they did not get any cars at all. During that period we were able to enjoy the advantage of private cars and get a higher percentage than the perecentage of the district. This statement includes all cars, so the railroad tells me, private and railroad-owned, and, of course, when there was a shortage of railroad cars we had the advantage of our private cars. That is what we bought them for, and are willing to suffer that loss for, that is in order to be able to furnish a regular supply of cars to our mines. We think that stabilizes the coal industry by giving more regular employment. We do not make a practice of contracting for a part of our output and leaving the rest for spot. (802) We try, and usu-

ally do, contract for our entire output and our private car
2670 is an advantage to us in that respect. I am familiar with the operation of cars under the assigned car rule in the past. As to whether during the fall of 1922 there was a car shortage in our district, there was some shortage. Coal mining had just been resumed in the union districts and everybody wanted cars. We suffered like everybody else. During that time we were able to enjoy the advantages of our private cars, because there were no other cars there some days. (803) Of course we got the cars because there were no others coming to the district. It was not as if other cars were to be moved; but they were not there. Not all the cars in that district were private cars. They were mostly private cars. For instance, the railroads still kept buying fuel coal and they took care of themselves, naturally. They put in a full supply of railroad-owned cars for their own fuel. As to whether a mine not having railroad-fuel cars or private cars suffered by this shortage, I won't say that it suffered, because there were always some railroad-owned cars, and if we had not had our private cars we would have got our proportionate distribution of those railroad-owned cars, and the other mines would not have got any, or they would have got fewer, but, having our private cars enabled the other mines to get the benefit of the railroad-owned cars. (804) As to whether there was a locomotive shortage in our district in the fall of 1922, from my knowledge there was a smaller locomotive shortage on the Pennsylvania than on any of the other coal-carrying railroads. To my knowledge there was less trouble among the shopmen on that railroad than there was on the other coal-carrying railroads. The locomotive shortage, I do not think, affected the coal shippers on the Pennsylvania Railroad very much after the strike was over. I am quite certain it did not affect us. As to whether there was a car shortage at that time, there was. There was, I suppose, a car shortage in that district. As to whether that
shortage was a result of a locomotive shortage or because
2671 there were not enough cars on that system, I could not answer.

As the rule to be prescribed by the commission for the future with regard to distribution of cars when there is a locomotive shortage, (805) that is a transportation question. When there is a locomotive shortage, I suppose the railroad will use what locomotives they have and distribute all the cars they can. They want the business. They want to get the freight. As to how the cars should be distributed—if, for example, the Pennsylvania Railroad has two 40-car-capacity mines on our division and has enough private cars to furnish our mine with 100 per cent and enough system cars to furnish the mine next to it 100 per cent, but the motive power is in such shape that the railroad can serve those two mines together with only 50 cars, that is a transportation question. Naturally I would like the railroad to place all the cars at my mine (806) and haul them away as soon as they were loaded, but as for making a rule for distributing the cars that seems to me to be a transportation question. I would say that equal treatment ought to

e given in the distribution, just as it is to-day. As to whether our nine would get 25 cars out of the 50 and the other mine would get 25 cars and the locomotive power prorated in that way, my answer s, yes. I should think probably the railroads would do that. I think hat would be a fair distribution. I would not like to say offhand. As to whether my position is that the assigned car rule would not be invoked during the period of locomotive shortage, I do not see how you can say that the assigned car rule would not be invoked. Supposing the railroad had a contract with one of your mines, a mine that did not have any private cars, to take the entire output of that mine, (807) I do not see how they could get out of taking it and letting the private car mine go without any cars. My experience is that the railroad will always take care of itself first. As to whether

2672 in the hypothetical case of the two mines I would expect the railroad under the assigned car rule to place 40 private cars at our mine and then use the rest of the locomotives available to place 10 cars at the 40-car unassigned mine, I would not. I would expect the railroad to utilize the power they had available in the best way they could. The situation changes so from day to day. They might, for instance, be able to do without the fuel coal for one day from that mine with which they had a contract. If that mine was a commercial mine, (808) I would say they ought to use the power that they have and the power that is available in the most economical manner; that the power ought to be used where it could haul the most coal the quickest. As to whether it is my position that the railroad should serve mines on a branch of the Pennsylvania near the junction with the main line rather than go down to the end of the branch to serve mines there, that is not my position. Up to this time, at least, we have not considered private cars in the assigned car category. When we speak of assigned cars we mean railroad-owned cars that are assigned usually for locomotive fuel. (809) Our private cars are practically not used for locomotive fuel. They are all used for commercial purposes. Our private cars are consigned to our mines. Under the assigned car rule all of our private cars are placed at the mines we designate. That is true during a locomotive shortage, if they have the power to place them. If they have not the power, we do not get the cars. As to whether in the hypothetical case if the railroad can haul only 50 cars and there are plenty of private cars and commercial cars, I would expect our private-car mine to get 40 cars, leaving 10 to be placed at the other mine, I did not say that. As to how it should be done, I do not think I am in a position to answer. That is a transportation question.

By Mr. BROWN (810):

2673 I do not think we would be able to make our long-time contracts with these same people if we did not have these private cars. The surety of supply has great influence with our customers. I do not say we could not make all our contracts, but I think some of them we would not be able to make because, as I say, the customers like to feel that they are reasonably sure of getting their coal.

By Mr. HIGGINS:

As to the peculiarity of our situation in the particular field in which we are located, in the quality of gas coal I rather meant having only two companies selling that particular grade of coal. We are very much in competition with gas coal from other sections of the Pennsylvania and the Baltimore & Ohio Railroads. I do not think the private car is a penalty to the other mines on those two railroads. (811) I think if we choose to invest our money in private cars we are perfectly justified in doing so, and if a man on the Baltimore & Ohio does not choose to do so that is his business. If we did not have any private cars at all, the distribution of cars would not be increased. There would be 2,000 less cars on the Pennsylvania, and our having our private cars increases the number of railroad-owned cars to the mines that have not private cars. (812) I do not know that if we did not have those 2,000 cars the Pennsylvania would provide additional equipment to take care of the movement of our coal. They have never had enough cars, and even if they did provide enough open-top cars you cannot tell. Other mines might develop and they might be diverted for sand or bricks or steel products or anything you please. We cannot take any chances; that is the point. We cannot trust the other fellow. We have to look out for ourselves. We are certainly looking to the economical operation of our properties; that is perfectly true; but we think by furnishing our own cars and furnishing more of our own cars we are helping the economic situation.

2674 By Mr. GREEVER (813):

In referring to the labor turnover at our mines, I said it was smaller and that the men like to work there because of more regular employment. As to whether the privately owned cars giving such employment tend to attract men from mines not so supplied, I think regularity of employment always attracts men. That is one of the results of privately owned cars, and a good result.

By Commissioner POTTER:

Our use of private cars does not increase our percentage of railroad cars. (814) We have to count the number of our private cars in the percentage, so we get fewer railroad cars because we have private cars. The other shippers who have no private cars receive a larger percentage of railroad cars because we have private cars. As to the quality and characteristics of coals in the Pittsburgh district, I think the so-called Pittsburgh vein is supposed to run more regularly than any other vein east of the Ohio River. All mines do not have the same volatile content nor the same carbon content, and, what is more important, they do not have the same sulphur content. They do not have the same ash. There are different mining conditions in the different mines. More dirt comes in from the roof in some than in others and in the floor. In some places the roof is more dangerous. In some places there is more gas. The Pittsburgh seam

is generally considered to be the most consistent, but there are considerable irregularities in it here and there just as in our own field. At the north end of our field the Pittsburgh seam is too high in sulphur to sell coal to the gas works. Some coals are used in preference to others for particular purposes in that section. At one of our mines the coal seems to be most liked by the steel companies. At other mines it is the gas companies who get the coal. Even they
2675 have their preferences and say they like coal shipped from a certain mine. Some coals sell ordinarilly at higher prices than others.

OCT. 26, 1923.

Mr. JOSEPH MITCHELL BELLEVILLE (824) called as a witness and having been first duly sworn, testified as follows:

Direct examination by Mr. CARMALT:

I am general traffic manager of the Pittsburgh Plate Glass Company, Pittsburgh. My company has filed a petition for this hearing. Our first business is the manufacture of plate glass. (825) We have factories at Ford City, 40 miles north of Pittsburgh; at Creighton, 18 miles north of Pittsburgh; Charleroi, Pa., 40 miles south of Pittsburgh on the Monongahela River; Kokomo, Ind.; and Crystal City, Mo. We also operate a large chemical plant at Barberton, Ohio, where we make soda ash and caustic soda and other heavy chemicals. We have a large limestone operation at Fultonham, Ohio, which is close to Zanesville, Ohio, where we prepare limestone for our Barberton plant, and we are also putting up, and have about completed, a cement plant. Our company owns 269 private cars, all told. Our chief purchase of cars was in 1901. At that time a special rate was made on coal hauled in individual cars, the theory being that the use of the car was a big factor in the rate. For that reason we bought 85 50-ton steel hopper cars at an expense of very close to $100,000. At that time we operated a mine at Mosgrove, 10 miles north of Ford City, and another mine at Creighton, Pa. (826) We used the output of the Creighton mine at our two factories at Creighton and Tarentum, and supplied Ford City from Mosgrove, and it was for that movement we bought 85 cars. The movement from Mosgrove to Ford City was a ten-mile haul. In 1916 we bought 16 30-ton wooden gondolas to help out the coal situation. By that time we had closed out our mine at Mosgrove and were supplying our Ford City factory from the mine at
2676 Creighton. In 1918 the equipment which we had was not sufficient to handle all of our coal, and we bought 10 55-ton steel hoppers. In 1920 we bought 40 more. The factory had been largely increased and required nearly twice as much coal as we did in 1918. In 1923 we bought 118 50-ton hoppers for the use of our limestone plant at Fultonham. Of the 269 cars, 151 are used in carrying coal. With respect to the cars at Fultonham, we are lo-

cated on the Zanesville & Western road, which is part of the T. & O. C., a big coal-carrying road. After we got in operation we found that it was almost impossible to get a sufficient supply of open-top cars to handle our limestone from Fultonham to Barberton. (827) We use about 1,500 tons a day, and we were obliged to buy these cars and put them into service in order to secure a constant supply of limestone, the open-top equipment there being entirely used by the coal trade. Our coal investment in cars is about $500,000, in round figures. The coal cars are used at the Ford City plant for hauling coal from the mine at Creighton to Ford City (828) a distance of 22 miles. That is on the Conemaugh division of the Pennsylvania. The movement from the mine is from Creighton to Kiskiminetas Junction, where it takes the other division, the Oil City division, and moves to Ford City, about 8 miles. The coal is taken from the mine to our Ford City plant by local coal trains and requires no classification at all. There are other mines on the branch, but they are right adjoining us. They are in the general coal trade. (829) As to the engine service those mines require, as compared with ourselves, the only difference is with us we ship generally from 20 to 25 cars which are taken out in one drag, and frequently a coal train picks them up on the mine track and takes them through to Ford City, while the coal from the other mines has to be classified and taken to Peterson yard and there classified. We have very rarely had experience with motive-power shortage in handling our cars in that territory, and when it has been it has been a total shortage and not a partial one; that is,
2677 in cases of accident to motive power that would put us out of business, as well as other adjoining mines. I don't recall anything that would strictly be called a motive-power shortage in the years that we have been operating there. There have been days that owing to accidents resulting in breakdown of service for a day or two, perhaps. (830) Those periods have been very infrequent. Our industry is not one that is or has been included in times of stress as entitled to priority. As to the reason for purchasing our cars, as I stated, our first purchase was because of the very decided difference in the rate when coal was hauled in individual cars, and later, from 1916 on, we purchased them simply to keep our factories in operation. The manufacture of plate glass is a continuous process, and shutting down of the factory brings very heavy losses. These cars were bought simply because we had to have our factories in continuous operation, and it was the only way that we could insure a steady supply of coal. We own our own mine at Creighton, and the cars are used from our own mine to our own factories and do not go in the general trade. (831) When we first began operating the cars, the mileage allowance was six-tenths of a cent per mile and we made up figures that showed that it did not cover one-tenth of the cost of repairs. The mileage allowance now is about a cent and a half, and the latest figures (832) that have been made in

ny office in that connection showed that it did not cover the cost of he repairs to the cars. I have made up a statement of the coal shipped from the Creighton mine to the Ford City plant covering the period from 1920 to and including the first 9 months of 1923.

(The statement referred to was offered and received in evidence as Exhibit R–15.)

Summarizing this statement, it is substantially true that for the most part we furnish the entire car equipment for the
2678 handling of fuel from our mine to our plant, except that when there was a surplus of railroad equipment we used it.

2679 With respect to the shipment in 1921 of 82,000 tons in railroad cars and the shipment of only 3,000 tons in railroad cars in 1920, (833) in 1921 there was an abundant supply of railway company cars at certain periods. (836) We purchased coal for the Ford City plant in 1920 from outside sources. I can not say how much. The mine does not fully meet the requirements of the plant. (837) There has been only an occasional or intermittent shortage of motive power on the divisions on which our cars are operated. As to whether the requirements of our company in moving coal from the mine to the Ford City plant require the use of any more of the terminal facilities of the carrier than the movement of coal from other mines in the vicinity, the answer is "No." The cars are taken direct from the mine or from the Peterson yard, immediately adjoining the mine, and placed on our interchange track at Ford City. We own our own side tracks at the Creighton mine and our own terminal at the Ford City plant. (838) There is no other terminal facility of the carrier that is used in the transportation of our coal than these two. I subscribed to the proposition that if there is a shortage of motive power the private car should have no more than its fair share of the use of the available power. When there has been a shortage of motive power we have taken our medicine along with the other operators in that territory. As to whether if there should be a shortage of motive power on the Chesapeake & Ohio Railroad and no shortage of power on the Pennsylvania Railroad and a shortage of cars, I would conceive it to be a reasonable rule that would deprive me of the use of my private cars; because of the shortage of motive power in another territory, I would not.

2680 Cross-examination by Mr. BROWN (839):

We had a phenomenal business during 1921 and ran all our factories to the fullest possible extent. The coal shown in our exhibit as moving in railroad cars in 1921 was not because we could not get enough coal in our private cars. There was a good part of that year an abundant supply of railroad cars, and we preferred to use them rather than our own cars, and availed ourselves of that opportunity to make some important repairs to our cars I don't recall whether the price of coal at that time was low or high, or whether we bought a lot of coal on the spot market. We only bought from outside sources 9,435 tons. (840) When there was

a 50 per cent car supply on the railroads in our territory, our mine did not operate to full capacity. (841) It did not make any difference to us what the supply of cars was to the neighboring mines there, the purpose of getting the cars was to have our mine operated to the capacity necessary to keep our property running. We have a lot of plants where we do not use private cars. They all use coal. We did not buy private cars for all of the plants, because we were able from other sources of supply to get a sufficient supply of cars, and we were not able to in the Pittsburgh district. Generally speaking, at these factories we have outside of the Pittsburgh district we were able to get all the coal we wanted from the carriers' cars.

By Mr. LIVERIGHT (842):

For our Ford City factory we secured our outside coal mainly
from mines in the immediate neighborhood on the Allegheny
2681 Valley division of the Pennsylvania. For our Kokomo, Ind.,
factory, we secured a part of our coal from the Indiana field, but our gas coal we got from West Virginia mines. As to whether the coal we procured from the Allegheny division of the Pennsylvania Railroad was on a percentage basis of distribution, it was, I suppose. As to whether we got fairly good deliveries, well, we had to distribute our orders among a number of mines in order to get sufficient coal. We got the coal. The operators lived up only partially to their contracts, probably 50 to 75 per cent. (843) As to whether that was as well as I could expect in human probability anybody could have maintained a contract, it was. They did that during periods of car shortage as well as of car plenty. We had to divide our orders among a great many different mines, and in order to get sufficient coal from nearby mines we used motor trucks, because they could not get sufficient cars. I can not say what the car supply on the Allegheny division was about the time we made our contract. I am familiar with the Conemaugh division and the Allegheny Valley division, because we use both of those divisions in taking our coal from our mine at Creighton to our factory at Ford City. The Conemaugh division extends from the north side of Pittsburgh to Blairsville intersection, on the main line of the Pennsylvania. It is a large supplier of railway fuel coal. (844) Whether it is one of the largest on the Pennsylvania Railroad, I can not say. I don't know anything about fuel coal, but I do know that there was a good supply of motive power, as a general proposition. (845) Our mine is 22 miles distant from our plant, and there is a through service, except for the
interchange at Kiskiminetas Junction. I can not answer
2682 the question as to what time is consumed in running loaded
trains from the mine to our plant. At times the coal is moved straight from Peterson yards to Ford City. (846) In that case it goes up in about four to five hours, but most of the time I think it takes about two days, on the average. Dependent upon the circumstances, our private cars make from eight to twelve trips

a month. I do not know how many trips a month are made from the other mines nearby ours to Ford City. The cent and a half revenue a mile applies both loaded and empty, going and returning. (847) We did not make any arrangement with the Pennsylvania Railroad to have these cars placed on that line. We bought the cars and notified the railroad that we had purchased them and proposed to use them in that specific trade, and they issued necessary instructions. We have no contract with the Pennsylvania Railroad, no arrangements about maintenance of the cars. We attend to maintenance of the cars ourselves.

By Mr. ROPIEQUET:

As to the location of our plate glass plants, we have two factories at Ford City, one at Creighton, both of them on the Allegheny River; a plant at Charleroi, Pa., which is south of Pittsburgh on the Monongahela River; another plant at Kokomo, Ind., and one at Crystal City, Mo., 40 miles south of St. Louis on the Mississippi River. (848) The coal we procure for our plant at Crystal City, Mo., we get mainly from our Illinois fields. The bulk of the coal originates on the Illinois Central Railroad. At present it moves over the Illinois Central to Coulterville, and thence via the Missouri-

Illinois Railroad to St. Genevieve, Mo., and thence to Crystal
2683 City via the Frisco. When the Illinois Southern was out of commission the coal either went down the river to Thebes, crossed the river there and came up by the Frisco to Crystal City or went into St. Louis and came down over the Frisco to Crystal City. The bulk of it, however, moved via Thebes when the Illinois Southern was out of business. (849) There was considerable of the tonnage from Coulterville itself which went by way of St. Louis. We had no difficulty in getting the coal for our Crystal City plant without private cars from that field. The Frisco was the terminal line.

By Mr. BROWN:

We do not sell any of our coal commercially except to our employes who live at our Creighton mine.

By Mr. GREEVER (850):

We bought our cars not to help the railroad out but to help ourselves and to keep our factory in operation and we believe that our using our private cars there helped the situation at the other mines because, say, there were 100 cars available; the other mines got just that many more due to the fact that we furnished the cars for our entire movement. As to whether the situation as a whole would be the same so far as the railroad is concerned and the public is concerned whether we got all of the private cars or they were distributed among all the operators (851) and it would just increase the number of cars that much, my answer is "Yes." We bought them because it was profitable for us to own them and operate them although the mileage we receive does not pay for repairs. We

bought them simply to keep up a steady supply of coal. As to getting a better service from owning the cars than if we did not own them, I was held responsible for keeping our factory in operation and I went to our board of directors and urged the purchase
2684 of these cars and I had to urge it pretty strongly, and I told them that that was the only way I could keep a steady supply of materials to the factory. As to whether by owning those cars we get better service, that is fuller car supply and more regular car supply, and including the movement of the car from the mine to the factory (852), we certainly do.

By Mr. CURRY:

The Creighton mine on the Conemaugh division of the Pennsylvania Railroad is the only mine to which we have private cars assigned. That mine is owned by our company. We did have a mine on the Allegheny division of the Pennsylvania Railroad but it is not in operation. My impression is that it was sold. (853) So far as I know we have no ownership in any mines on the Allegheny division now. We have no contracts now with any mines on the Allegheny division. The mines from which we take coal in Indiana for our Indiana factory are on the Indianapolis & Vincennes division of the Pennsylvania and are not owned by us. The mines on the Illinois Central from which we take coal are also not owned by us. As to the contracts we have with the mines which we do not own, (854) that matter is entirely handled by our purchasing agent and I do not know what the terms are. We do not take the entire output. They are partial output contracts. Since the end of Federal control there have frequently been car shortages on the Illinois Central which serves the mines from which we had contracts. As to whether we were still able to get our coal, we were not from the contract mines. We had to go out and buy spot coal to meet the situation. As to whether we had to assign any private cars to that field, we had none to assign. I think there were frequently car shortages during that period since the end of Federal control on the Indiana division of the Pennsylvania, but not severe. As to securing our coal
2685 from that territory to supply our plants, we had to buy outside coal very frequently. In other words, the contract mines (855) were not able to meet our requirements and we had to go into the spot market and buy coal. We have not had any privately owned assigned cars out in that territory. We have owned the Creighton mine for about 25 years and have followed the practice of assigning our private cars to that mine ever since 1916. The use of those private cars was undoubtedly a loss to us. This has been true ever since we have owned private cars. As to how that loss is offset so far as our company is concerned, (856) that expense is incurred to keep our factories in continuous operation. Glass making is a continuous process and any shut down of the factory causes very heavy loss. There is an advantage in the ownership of the private

cars. At our plants at Pittsburgh and at our other plants in fact we have never let our stocks go below 30 days and we generally have about 90 days' supply of coal in stock. Following the period of Federal control there was a period of severe car shortage on the Conemaugh division of the Pennsylvania Railroad. I can not testify, however, as to the exact period. During that period we were able to get substantially the full placement of our private cars at our mines. (857) The private cars were undoubtedly an advantage to us at that time so that we could operate a little better than if we had not had them. There were other mines in that district which did not have assigned cars. There was a car shortage last fall about a year ago on the Conemaugh division following the shopmen's strike. As to whether there was a locomotive shortage on the Cone-

maugh division at that time, we had no demonstration of it
2686 in the movement of our business except as I have stated in one or two cases where there were breakdowns. I never heard the question raised of anything but a shortage of cars on the Conemaugh division. I never heard any complaint made of a shortage of power to move the coal. (858) As to whether a shortage of cars is ordinarily spoken of as involving also a shortage of motive power, my answer is, "Yes." As to whether with respect to this assigned car rule from the standpoint of the reasonableness of it, I do not desire any preferential service in motive power, I do not. If it be supposed that on our division there are just two 40-car capacity mines, one a private car mine and the other an unassigned car mine, and there is a 100 per cent supply of private cars and a 100 per cent supply of commercial cars, but the motive power of the Pennsylvania can serve those mines daily with only 50 cars, the question of distributing those cars (859) seems to me to be a problem for the railroads and not for the shipper; an operating proposition. (860) I can only say that with regard to a shortage of motive power such as suggested, we would expect to have our pro rata share of the power as well as of the other, unless there were local conditions that made it easier for them to handle business out of our mine than the adjoining mine. For example, here is a mine alongside of us turning out, say, 25 cars of coal a day. We use 25 cars. The 25 cars taken from the other mine have to be taken to the yard and classified and sometimes that coal would be for ten or twelve different consignees at different destinations while ours would just simply have to be pulled out and taken up to our factories. In that case I take it

the railroad might feel justified in giving our cars preference,
2687 but that is a problem for the railroads. (861) It is not for us shippers to dictate. As to whether the fair thing under my theory in the hypothetical case of the two 40-car mines would be to give my mine 25 cars and haul 25 cars away and give the other mine 25 cars and haul 25 cars away, my answer is, "All conditions being equal, yes."

EDWARD J. BERWIND, (867) called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. GUTHEIM:

I live in New York and I am president of the Berwind-White Coal Mining Company, which operates private cars. (868) I have had prepared a memorandum which tabulates some of the outstanding features of our private car operation and the coal that is transported in those cars. This memorandum is a correct representation of the facts stated therein as far as I know.

The document referred to was offered and received in evidence as Exhibit No. R–16.

(869) With respect to the decreased tonnage shown on this statement in the year 1922, that was due in part to labor trouble at the mines. In 1921, as you will observe by this statement, we shipped 3,387,368 tons; in 1922, 1,912,904 tons; and up to September 30, 1923, 2,575,679 tons, the tons being of 2,240 pounds each. The strike in 1922 is responsible for the decrease from 1921 and for the increase of 1923. With respect to our steamship bunkers tonnage, in 1921 we had felt a very serious competition by oil, (870) and our tonnage has been decreasing for a number of years previous to that, since the introduction of oil, which made an invasion of from
2688 1,200,000 to 1,300,000 tons this year and last year a little less.

Fuel oil competition has been brought about by high prices of coal and large production of oil and the great detention which steamers, which are chiefly the users of oil, have been subjected to. For instance, large express steamers take from five to seven thousands tons of coal ordinarily at every landing in New York. They are only in port four or five days and have to have the greatest facilities for carrying the coal over and getting it into their bunkers. The difficulties during the war and the strike since, in labor and otherwise, are responsible for great delays to those steamers in getting the coal aboard, and the ships were (871) held up and could not sail on their schedule. That was a great factor. That oil, of course, is simply turned on and they fill their bunkers. A ship can turn around in three or four days, which is very important to those steamers which cost from five to twenty millions of dollars. They can save time and they can make a better showing than they can with the delays incident to labor. That brought about a situation where oil became a very important factor in the competition with coal. Referring to my exhibit, the figures show in 1921 that it cost us 8 cents a ton loss in operating private cars; in 1922, 12½ cents a ton; and in 1923 up to date at the rate of 18 cents per ton. The Berwind-White Coal Mining Company has been operating private cars since 1888. (872) The history of our investment in private cars is this, that in the late seventies and early eighties steamships running to New York took from five to six hundred tons per trip. They lay in port anywhere from 10 to 15 days, and the service could be performed

thout the use of private cars, but not with the promptness that they required. The business was then done in this way.
89 Steamers require coal of very low volatile matter, very high carbon, very little sulphur and little smoke, as a consequence f low volatile coal. They want something that approaches as near e Cardiff coals as they can get. In other words, a very high class f low volatile coal to perform the services required. It has to be ored in bunkers, occupying the least space possible and it has to e coal that is free from impurities. Otherwise it detains the ship in ransit. (873) You can not take a low quality coal or even second ate coal at any time. That will not be allowed in the steamship usiness. It is to its disadvantage. This business was a growing usiness and beginning in 1876 we built on up until 1888 when we ad a very large business which we handled with our Kitanning ein of the Clearfield coal at that time. We had more or less success vith that but as time went on the necessity for a better movement ecame very apparent to us and the building of these large ships eing increased every day brought to our mines the necessity of uilding up commerce that would be very valuable and should be lelivered by rail and not by the crude fashion of shipping coal by water from Baltimore, from the Georges Creek region, to New York in schooners and transferring it from schooners into barges and putting it alongside. That was the standard method of furnishing bunker coal in New York at the time we went into the business there in 1876. (874) There was no bunkerage business then running on the Pennsylvania Railroad. I was previously a naval officer and retired from the Navy in 1875 and went into business with the Berwind-White Company before it was incorporated and devoted myself to the development of the steamship business much more than anything else. This business increased rather more rapidly than we expected. We commenced with a very small tonnage in
2690 1876 and by 1880 it had grown up to several hundred thousand tons. These were mail steamships which had to sail on certain days under a penalty with the Post Office Department. We had great difficulty at times in getting this coal forward to meet these requirements. The coal had to be shipped and had to arrive there and be in barges alongside for delivery aboard these ships. The result of that was that we found ourselves in a position frequently of not having sufficient cars to move this coal (875) from the allotment allowed by the railroad. We constantly pressed the railroad at that time for additional facilities and we kept pressing them but we found that as the business increased the difficulty became greater and we frequently failed in our deliveries due to the fact that we could not get those cars forward. The result was that we made these repeated complaints and at that time there were several concerns that had private cars long before us. They said, "Your only remedy is, and it is for all shippers engaged in that kind of business, to buy your own cars." We thought that matter over and concluded that

it was worth the investment to do it; that we could not look for a supply of uniform quality, high class coal which the steamships required unless we did that. We then built enough cars to meet our requirements. We then built 250, or at that time a fewer number, of our own barges. (876) We had our own docks and we stored coal as far as possible in these barges and docks, in connection with the movement of our private cars, which gave us the service which enabled us to coal these steamers on time. We increased that car service as exigencies of the case required, adding to it what was required by public utilities and those things, which could not wait for coal but had to have it every day. We increased the barge service very much, having to-day about 250 or
2691 275 barges varying from 350 tons to 1,400 tons capacity. A steamer arrives in New York and has three or four days to turn over. The coal is loaded in barges and stored and as soon as the steamer gets rid of its passengers, there are from four to six boats put on it, it is breasted off, and the coal put on board. It is not possible to get those steamers off unless you have your coal in barges ready to deliver. As the years went on there was other business developed in and about New York Harbor. (877) For instance, the subways were developed which are very large consumers of coal. The electric-light business was developed. The Brooklyn Edison and the New York Edison developed that business very largely and called very heavily for a uniform quality of high-class coal. We further developed the fact that we had to look elsewhere to get enough of that high quality coal, and we bought 60,000 acres in the present Winbourn district where it was considered impossible to build a railroad, and I was obliged to build the railroad myself to get it out. That gave us a large acreage to develop upon which we have developed ten or twelve collieries of a capacity of from 25 to 60 cars a day each. There is a large body of exactly the same coal which we make special preparation on and which is demanded by large corporations of a certain kind. The generation of electricity requires this high standard of coal because a varying kind of coal in these power houses is a great damage to their arrangements and very costly to them. They have to have a high fluxing power, a high carbon and low ash and freedom from sulphur or very low sulphur. (878) Then there are other industries, for instance, the by-product industry. There were lots of other developments in New York on a scale which made this coal business a very important business and required the investment of large sums
2692 of money to bring it about. The railroads never were able to handle that business in the way that it has to be carried on. No company could undertake to do that business unless they owned these properties. They could not rent them and do it in the same way. They can do it to a certain extent but there is no company that I am aware of that has the acreage of high-class coal that can deliver the quantities per diem that we have. We were not able to do it without private cars. The New River & Pocahontas Consoli-

dated Coal Company is a Berwind property. As to how its output is marketed, we sell most of our coal from those two districts at tide, but particularly the Chesapeake & Ohio. The Pocahontas properties are particularly sent to our docks at Lake Superior of which we have two large docks for the western business.
2693 (879) The rest is sent to tide. We do not customarily move any of our C. & O. production west. I believe there has only been one exception in our history where we did it, and that was under the orders of the authorities in Washington. As to whether that was at the close of the year 1922, I think it was. I have forgotten the exact date. We have about one thousand private cars in the service of the New River & Pocahontas Consolidated Coal Company that are operated on the Chesapeake & Ohio. There are none at all on the Norfolk & Western. (881) There are two reasons for our operation of those cars on the Chesapeake & Ohio, and not on the Norfolk & Western. One is, we think the C. & O. coals are slightly better adapted for the bunker business which we are specially looking after at our various depots in the West Indies, and the other is that the Norfolk & Western give good service on their road, better service than we could get on the Chesapeake & Ohio. I believe it is generally admitted that the Norfolk & Western Railroad has given better satisfaction on the question of car supply than any other railroad engaged in the traffic. Our company is engaged in the steamship bunkerage business, not only in New York, but in Boston, Havana, Cienfuegos, Trinidad, San Juan, Porto Rico, and in Mexico. We have bunker stations of our own, equipped by ourselves, and we use those depots in the distribution of coal for bunkering purposes. The coal supply for these bunkerage stations moves from Hampton Roads chiefly and from Newport News where we have steamers engaged. (881) We own the steamers to a certain extent to supply the greater portion of that coal. We customarily keep a supply of coal on hand at all of these bunker stations, anywhere from thirty to fifty thousand tons. In the smaller stations, from ten to fifteen thousand tons. I think about 75 per cent of the entire production of the Berwind-White Coal Mining Company is sent to New York.
The increase, of course, in these industries of which
2694 I have spoken has been very large. The increase in the number of ships has been very large. It went on, on a very large scale, until 1914, when the war broke out and, of course, a great deal of shipping was used in other purposes and was withdrawn, and the quantity of bunker coal was reduced to some extent. This business of bunkering is a very hazardous business in a way. It can not be conducted on the present methods of running steamships, excepting you have uniform delivery of coal coming every day in the year, the same as a public utility has to have. (882) This is especially so in recent years because of the fuel oil competition, because while we have more facilities for putting coal in the bunkers and for turning steamers of 6,000 tons and over, by putting barges

alongside, in, say, 24 or 36 hours, in one or two cases, it requires every facility and every energy to bring that about, so that those steamers can sail on time. We are meeting this fuel-oil competition in the sale of coal for purposes other than bunkerage. Fuel oil is being introduced in various industries in New York to-day. It is quite a competitor. They run their cars without intermission and without interruption. The coals of the New River and Pocahontas region come nearer to the Cardiff coal than any other, as a whole, but it is not so in Pennsylvania. (883) There is only a limited amount of coal in Pennsylvania which meets these conditions, and I think we own a very large share of that. We take a great deal of care in the preparation of our coal and have never failed in a delivery since we had the introduction of our own cars, and never even before that. It is not possible successfully to continue as a competitor of fuel oil in the steamship bunkerage business in the future unless we can guarantee to make the same deliveries. It must be obvious from the fact that they turn on a spigot in the fuel-oil business and let the bunkers run full, and it takes about 18 hours with the
2695 largest of ships. We sell no spot coal. Our business is all contract business and it goes on 365 days in the year; goes on all the time (884), so that we can not put off delivery. We can not do anything of that kind, especially in the steamship business and in the public-utility business, to a large extent.

Cross-examination by Mr. GREEVER:

There have been great developments in the coal business, as well as others, since the period about which I first spoke, since 1880. A great many mines have been opened up in these different coal fields during that time. I am in the coal business to make as much money as I can lawfully. No profiteering. (885) We have found it necessary to operate private cars, not only to make money, but to give service required, or else the money could not be made. No man goes into business for pleasure. He goes in to make his concern a success, but I try to give what other people can not give and do not give. I try to live up to the contract which we made. Those contracts were made in order to make money. I think it is perfectly obvious that we find it profitable to own and operate private cars to do that. (886) I want the service, because these ships can not be served without these facilities. Our only obligation is our contract obligation. We are in the coal business to make money and have private cars in order to facilitate that object. (887) It is no privilege to own a private car. It is a necessity. As long as everybody has a right to build these cars and furnish the capital, and put their money into that business, and have the coal to furnish, that is not a privilege. (888) I claim no privilege at all, no discrimination in my favor of any kind, shape, or sort. I grant freely the same right to other people. As to what would become of the car distribution if all the operators
2696 on the Norfolk & Western, for instance, where we have mines, would reach the same conclusion that we have reached that it is

to their advantage to own and operate private cars, if you have cars enough and you haven't business to justify them, you lose money and you get out of business. (889) A man that has the business and can afford to run these cars and make the per se loss upon them, because he has high class coal, or a better sale or market, can go on with the business and the other man has to get out, which is the case on the Pennsylvania Railroad, because they had some 15 or 16 operators who bought these cars. They did that and those men continued for a time and then went out of business. They had some cars. They had all the facilities, but they had not the market to justify running those cars. The result was they withdrew them. If it be supposed that every operator in the Pocahontas field reached the same conclusion we have reached and bought private cars in proportion to the mine rating, the car distribution problem, as far as that is concerned, if you have your own cars and you can not sell your product, settles itself. It is an economic problem and will not run your cars. You have got to pay money. (890) As to whether this right of the individual to buy private cars is more a theory than anything else because only certain people can afford to do it, I don't think so at all. They can do everything that I do. There is no preference in the matter at all. With respect to what I have said as to my class of business, that is my affair. That is my merchantable side of my proposition. I have good coal in Pennsylvania of a very high class. That is another thing. As to whether, if all the operators in the Pocahontas field would conclude they ought to have private cars and that they were profitable, the car distribution would be based on car ownership and not on mine rating. I think that is a
2697 question for the railroads to decide. (891) Assuming that everybody could load all the cars they have, that is that they have a right to build all the cars they want, the economic end of it is the survival of the fittest. To suppose that all have a market for their coal is not a supposable case, but at the same time, supposing they have, it would be the survival of the fittest in the long run. They would all be treated alike and nobody would be hurt. As to whether the man who is able to maintain himself with private cars would have an advantage over the other, the answer is, "No." As to why, it depends altogether on how he is fixed. It depends on what clientele he has. It depends very much on a lot of other things; the money he spends in the development of his business. I might have use for private cars and the man next to me might not have that use. I have depots in the West Indies and can send coal down there when I haven't a market somewhere else, and fill up those depots. That all costs a great many hundreds of thousands and millions of dollars. That is what makes these mines efficient. (892) As to whether that means that the more money I have and the wider my clientele, the more I would get of railroad service by being able to own private cars, the answer is, "No." It means this: The railroads have the benefit of the private cars. You can not put any

other interpretation on it. The railroad that has private cars and hauls them has a distinct advantage. You take a concern like ourselves that has these collieries, all varying from 25 to 50 cars a day, giving this large amount of uniform coal every day, sending it in trainload lots almost to tide water, it is a positive advantage to the railroad because they charge freight rates predicated on one car and we have got to pay just as much when they haul a trainload out of my siding right into New York, yet the man who has one car sends it down to New York at the same time. It is a positive
2698 economy and money-saving device on the part of the railroads, providing the private car is used. It is no cost to the railroad. It is a saving. It is a saving to the other operators in this sense, that if we did not have these four or five thousand cars running in the service, they would have to give us four or five thousand cars. Four or five thousand cars distributed in a region is a great many cars every day in the service. (893) As to the question, "Suppose you were a little fellow instead of a big one, and you had a small mine, and there was a period of great car shortage—system shortage—and you had a big neighbor and you saw his mine running full every day, and the facilities of the railroad used up, and running his mine to 100 per cent capacity, and you got 10 or 15 per cent, or none, would you think that that man had some advantage over you or not," my answer is, "No." He has the same advantage I have. He has not got tools to do his business with. It is not money. It is the facilities that you give to your buyer. That means money, but you go into business to make money and you are not giving it away. He has the same opportunity to make a profit that I do.

"Q. [By Mr. GREEVER.] Not if he hasn't got the money that you have?

"A. Then he ought not to be in the coal business; not in the way I am in it.

"Q. Then you ought not to be in the coal business unless he has got the money that you have?

"A. No; not at all. I do not say that. I said that he has to have sufficient capital to conduct his business."

Whether it is a good thing for the operator to have private cars depends altogether on what business he has. He can not sell coal at his mine and expect to get the same results unless he has an
2699 organization to sell it, unless he has good quality and facilities. He has got to have the business. It does not all end at the mine. (895) The net result of all this is that if you can afford it, it is a good thing for you to own your own cars, if you own a going coal mine. There is no desire on my part to spend large money on private cars, but it is necessary for me to do it to prosecute the kind of business I am doing. Any other man that wants to develop that business has the same opportunity that I have had and that I have to-day. He is not hampered by any preference of any kind. I have no preference of any kind from the railroads or from

anybody in movement or in any other way. (896) The man who owns his own cars does not have an advantage at all unless owning those cars will help. Then let him buy them. That is his privilege. I do not admit that the man who has not bought private cars is in the same position that the man is who has a sale for his goods. He has got to have a sale for his goods. He has to provide facilities in order to run his mine. If he can run on the Norfolk & Western, if he has got a clientele which will absorb his coal, as some of these large properties have on the Norfolk & Western, he can sell it without owning cars. I do not own any cars on the Norfolk &
2700 Western Railway. (897) As to whether I am expecting to do so pretty soon, I am not. I wish I could, if the service is as bad as it has been in the last six months. We have our private cars so that we can preserve a regular supply of cars at all times during the year. As to whether that gives us the best business that is going, that is, the long-term contracts, it does not on the Norfolk & Western business.

"Q. [By Mr. GREEVER.] I say these long-term contracts that you have spoken about, which you say are such an advantage to the railroad.

"A. (Interposing.) Then if it pays me to do it, why don't the others do it? If they have got the coal and the facilities to do it, why don't they do it? (898)

"Q. I think that is what it will come to. That is the point I make.

"A. You said that wealth is doing it, and money is doing this. Money is not doing it alone. It requires a great deal more than that. * * * The operation of a coal property on a net profit basis is quite a scientific business, aside from the question of ability to move the coal. The quality of the coal is the first consideration, and that is lost sight of by many of us."

By Mr. GREEVER:

I am not a director of any coal-carrying road. (899) I said a large part of our business goes through New York, because it is the great port and draws that particular traffic which I worked so hard to develop, because as time goes on, the buyer is looking more for quality than he ever did. That was apparent twenty years ago and we have devoted our time to buying the best lands we could get, preparing our coal in the best way possible and providing facilities so that the customer could get the coal to
2701 suit his case. I have spoken of the great benefit to the railroad of the large number of cars that we run into New York. As to whether if that same number of cars belonged to the railroad instead of to us and became a part of the general pool the railroad would receive the same benefit as it does now, it would not. They would receive the same benefits up to the point, (900) provided we ship the same quantity of coal out of these collieries. The Pennsylvania Railroad, for instance, in Pennsylvania, in the Windsor dis-

trict, Cambria district, which is considered the best coal in Pennsylvania, being low volatile, high-class steam coal, and in which we have large collieries, walk in with an engine and pull down 25 or 50 cars out of the colliery and walk away with it right down to Harsimus, without having to switch out an engine at Harsimus, and they do not have to run a hundred miles to pick up that train load. That is a positive saving to the railroad and a great point in their favor, but we get nothing for that. The railroad gets that. As to whether if those cars belong to the railroad the movement would be just the same, I am not prepared to say that. I do not know. That is a railroad question. We lease a pier at Harsimus. (901) [Objection by Mr. Gutheim to the question as to the person from whom the pier was leased and the amount heretofore paid under the lease was sustained.] (902) Having a pier in New York with the kind of business we do is a convenience. There is no doubt about that.

By Mr. BROWN (903):

As to whether any coal operator in competition with us can sell to any of our customers unless he has private cars, why, plenty of them do. As to why then we got our private cars, I have testified I could not furnish all the coal that is required. They have to buy from somebody. I was talking of special business such as our business is. They do furnish some of our customers coal. During the war they got $19 a ton for it when I could not furnish it.
2702 (904) I said that we did not have to have private cars on the Norfolk & Western because the service was good. As to whether if the carriers render the service which the law requires them to render we would have to have our private cars, if they could furnish it 365 days a year, uniformly, no railroad could afford to do it in the kind of business that is done in the harbor of New York.

By Mr. LIVERIGHT:

In addition to the 3,078 cars shown on this exhibit (905) we have a thousand cars on the Chesapeake & Ohio Railroad. This exhibit shows an operating loss on the cars of 8 cents per ton in 1921, 12½ cents in 1922, and 18 cents in 1923, up to August 31. As to whether it is far counterbalanced by the advantages we enjoy through the use of those cars in making favorable contracts (906), that is not true at all, "because the prices of coal permitted at that time, I think my competitors—I had a lot of competitors who would not charge high prices for coal. People were willing to pay me a lower price and still absorb this cost." If we had not had these individual cars we would have had to share in the general distribution of the railroad companies. As to whether we would have had a far shorter supply of coal cars, I could not answer. (907) As to whether if the yards tracks, main tracks, lake and tidewater piers, and various other facilities should become overtaxed and congested, bringing about slower movement and longer turn-around of cars (908), I am willing in respect to my private cars to take pot luck with the rest

f the users of cars on the line; that is a railroad question pure and imple. I do not pass on the railroad end of the business. The ailroads can answer that. In saying that we never failed in making delivery, I mean to say that in an emergency it happened to us t times that when we did not have coal of our own we went out and urchased other coal to take its place. We always have got the coal to the customer as far as I know, except in an isolated case.

2703 (909) I am complaining because I want to protest against the withdrawal of the use of the private cars. There is an order out forward that the distribution of the private cars should be exactly the same as the railroad's allotment to the owners, and there are three months in the year when the private car serves a purpose; there are not over three months in any normal year where there is not full supply of cars to every operator on the railroad. We have to have service 365 days in the year for our business. Our business requires it and cannot be done any other way. It cannot be done on storage. And therefore we have to have ability to do that, and if we own private cars we cannot enjoy any part of the distribution of the railroad. That is our situation. I do not understand this order to mean that the private car had to be withdrawn. I understand they will allow us to use them, and use them for nothing; let them stand idle on the tracks if distribution is less than what we have of our private cars available. (910) As to whether if there is a shortage in the other facilities referred to, our cars would not be nearby the mines at all, I do not think we enjoy any facilities that are not common to everybody on the railroad. As to whether if we do enjoy any such facilities we want it done away with, I am not saying what the railroads should do.

By Mr. ROPIEQUET: (911)

We did find it necessary to use private cars on the Pennsylvania, but did not find it necessary on the Norfolk & Western, and the conditions on the two lines were the reasons for that difference.

"Q. [By Mr. ROPIEQUET.] Now, does the carrier use your private cars during this period when there is full car supply?

"A. No, sir.

"Q. Only in periods of shortage do your cars go regularly to your mine every day?

"A. The use of private cars precludes the use of any distribution of the railroad in any colliery.

"Q. At any time?

"A. At any time.

"Q. It is not only in the period of car shortage that yours are used, but in a period of car plenty?

"A. All the year round; yes, sir."

The figures show that the use of the car is an added expense to us. (912) It is correct that the railroad did not give us enough to pay for the use.

By Mr. CURRY:

We have no contract with the Pennsylvania under which
2704 these private cars are used. I do not know of any such document. We are "under the general use" of private cars.

By Commissioner POTTER:

It is desirable to have coal that approximates the Cardiff quality. In the first place Cardiff has been recognized since time immemorial as the greatest of steam coals in the world and they have gotten better results out of the highest class of Cardiff than they have out of any other coal. (913) And there is no coal in America or in any portion of the world that I have knowledge of, except the Norfolk & Western and the C. & O. coals, and the very highest class of Pennsylvania coal, which is known as the Miller seam generally, that will stand up with those coals. With the proper use of these coals we can evaporate as much water as they can with Cardiff coal. They want to carry the least possible amount of coal in the bunkers that they have to, and want coal that is not liable to spontaneous combustion and is as nearly smokeless as possible. Those are all requirements that require special preparation and a special kind of coal. The draft on these low volatile coals of high quality is about the same as it is for the Cardiff coal. It does not require readjustment. It requires different firing. It has always been desirable to take on coal at Cardiff for the trip here and coal here for the trip back, rather than load at Cardiff, except in cases where ships have no cargo and then they sometimes coal for the round trip, either at this end or that end. (914) That is why it is desirable to have coal here similar to Cardiff coal. At all bunker ports wherever our coal goes, the measure of that coal is the Cardiff price. That is why we have established these bunker stations at the points mentioned. It is more efficient to have a standard coal. It would not be practical for a steamship company like the Cunard Company to depend on
2705 the spot market for its coal in New York and it would not be feasible or possible for them to make contracts with ten or a dozen or fifty different coal people. (915) They have to have coal that they can guarantee. and if these people could satisfy them about it I have no doubt the Cunard people would be very glad to take some of that coal, but they have taken what they consider was the best available coal, and when we could not furnish it at times, when "our price—after the collapse came and there was an emergency here, where the steamships lost so much money—they have tried to economize in every way they can and they have tried some of these coals, but they will not contract for it." (916) A steamship company would not make a contract with anybody unless they first satisfied themselves by actual test that the coal is suitable and he had the facilities to deliver it. I am able to make a contract with a steamship company for guaranteeing the prompt delivery of coal of uniform high quality, but if I were dependent only on the spot market and did not have my own mines, I could not. Spot coal cannot be

used that way. We sell no spot coal whatever. I said that in order to be ready to promptly load the vessels there must be floating in the harbor, practically at all times, an ample supply of coal of fine quality. As to whether that condition of having that ample supply of coal of fine quality could be maintained, if anyone were dependent upon the spot market and had to buy from 50 or 100 producers, I don't think so. As to whether if the private car were abolished and the result of it was that consumers of coal in times of shortage would be compelled to buy from 50 people, the result would be that the floating supply would not be there, it would not, and besides in that period when coal is scarce the price of coal is generally advanced. You not only have to have the same quality of coal, but, if they did get it, it would be a higher price than any contract arrangements would be with those companies.

By Mr. CURRY:

2706 Our company suffers a loss of about a quarter of a million dollars a year in the operation of these private cars. We have not had any occasion to take that up with the carriers with a view to getting some rate that would prevent that loss, because I know very well they would not grant it. That would be a useless struggle.

F. A. SHICK, called as a witness, and having been first duly sworn, testified as follows (919):

Direct examination by Mr. FREDERICK BALLARD:

I am comptroller of the Bethlehem Steel Corporation and some of its subsidiaries, and auditor of other subsidiaries and am in charge of the records relating to its plants and facilities. I have had prepared under my direction a statement showing (920) the location, capacity, principal equipments, products of, and investments in the several steel plants operated by Bethlehem or its subsidiaries. I believe it to be correct.

The statement referred to was offered and received in evidence as Exhibit No. R–17.

That exhibit shows that there are seven separate plants and that at all of those plants there are employed 44,980 men, based upon the average of the first six months of 1923. The total cost of those seven plants (921) is $408,000,000. This exhibit gives some general idea of the nature and scope of Bethlehem's steel making facilities. I have had prepared a similar exhibit giving similar information as to the coal mines owned by Bethlehem, and believe it to be correct.

The statement referred to was offered and received in evidence as Exhibit No. R–18.

(922) This statement shows the location, capacity, production and investment in coal mines owned by subsidiaries of the
2707 Bethlehem Steel Corporation. It shows that there is in operation 25 tipples, with an approximate annual capacity of nine and one-half million tons, and based on the operations for the first six months of 1923, a production of approximately 9 million tons.

It shows an average number of employees of 7,848 for these six months and a total cost of the property, less depreciation, of $68,000,000. I know it to be a fact that different kinds of coal are produced by different groups of mines as shown on this exhibit. I have had prepared a similar statement showing the number of cars owned by subsidiaries of Bethlehem and the cost of those cars. This statement is correct. (923)

The statement referred to was offered and received in evidence as Exhibit No. R–19.

It shows a total of cars owned of nearly 4,000 with a cost of a little over $8,000,000. The market value of cars when built was about 8 and a quarter million. On the basis of the three exhibits just offered, I have prepared a summary sheet containing the outstanding data in these three exhibits.

The statement referred to was offered and received in evidence as Exhibit No. R–20.

(925) I have had prepared, from Government publications, a statement showing the total number of wage earners employed in the bituminous coal industry and the total number of wage earners in the iron and steel industry.

The statement referred to was offered and received in evidence as Exhibit No. R–21.

This statement shows nearly three times as many wage earners in the steel industry as in the coal industry.

By Commissioner POTTER:

The industries making "iron and steel products" mean those making the primary products, beginning with pig iron and open-hearth furnaces and steel works. It does not include the subsequent manufacture or fabrication of the products.

2708 C. A. BUCK, called as a witness and having been duly sworn, testified as follows: (926)

Direct examination by Mr. FREDERICK BALLARD: (927)

I am vice president of the Bethlehem Steel Corporation in charge of securing of materials for the making of iron and steel. I have been associated with the company for thirty-five years; first as chemist, then as metallurgist, then in the operation of plants, and for the last ten or twelve years in charge of securing raw materials. Our company operates, as shown by Exhibit R–17, over 2,000 by-product coke ovens. I supervise the fuel supply for those ovens. (928) It is true that a shutdown in the operation of by-product ovens would destroy or seriously damage the brick linings because of the great expansion factor of silica brick. That would apply to our by-product ovens. When the brick lining of the battery of ovens is once destroyed it requires four months to make the special brick for a new lining and about eight months in all to complete the work of relining the ovens. I could corroborate that from our own experience. After the relining in such a case had been

completed (929) there would be necessary a gradual heating up of the oven ranging from 6 to 8 weeks, before it could again be put in active service, in view of the expansion and contraction of brick. That is generally true of brick linings. As to whether it is disastrous to vary the coal mixture while a battery is running and as to whether this will either produce off-grade coke or will damage the oven, or both, that is true in view of the varying physical characters of coal. As to whether after you have determined a particular mixture of coals with which you are going to run an oven, it is disastrous to vary one component of that mixture, it is bound to influence the operation of your ovens and the re-
2709 sultant coke. (930) It is true that in such a case the introduction of an improper component into a predetermined coal mixture might affect the lining, or the oven, or might, in addition, produce a coal mixture that crumbled and produced no usable coke at all. As to whether it is correct that the adjustment of the coal mixture for any particular battery of coke ovens is a particular question as to that battery, to be determined in each case by the location of the battery, the various coking coals they have within practical reach, and use or uses to which the coke is to be put, each one of those elements is important in the construction of the oven and the resultant coke. That the fixing of a proper mixture for by-product coke ovens is so delicate an adjustment that the coal must not only come from the same field but a particular mine, is our experience. We found it necessary to acquire mines to get coal from particular mines, in view of our experiences.

2710 (931) Referring to Exhibit R-18, this is a record of the mines that we are operating and providing coal for our steel plant, for our coke ovens. It is quite true that one mine in a particular seam might produce proper coal for a given mixture, and another mine in the same seam would produce coal unsuitable for that mixture. There is quite a variation in all of the seams of coal, particularly in Pennsylvania. There is no uniformity regarding the seam, even in a particular district. The chemistry of the coal does not indicate the physical properties of the coal, so that a practical test of the oven has to be made in order to determine its practicability for the making of the coke, the physical properties which it may possess. (932) All bituminous coals are not coking coals and all coking coals are not suitable for each use, and for successful operation you must confine your supply to individual mines. Of the coals that are available to us, we do not believe that there are more than 15 or 20 per cent suitable for our use for coking purposes. We have examined something like 300 properties in order to select coal suitable for the making of coke for our purposes. Of the number examined there were only five per cent that met the chemical and physical requirements for that coal in the making of coke. (933) Those examinations were made prior to buying these coal properties which we now possess. That is the care that we believe is essential for proper steel making. In doing that we have had in mind the

coal requirements of our plants as to each class of coal. This is a statement showing the different varieties of coal that we use at our different plants under normal conditions, and is correct. (934)

(The paper referred to was offered and received in evidence as Exhibit No. R-22.)

In the making of coke we use and require three different grades of coal. In the making of gas, which is the only other
2711 use which we have particularly for coal, there is another selection. It is a gas coal that is used in the gas producers.

By Commissioner POTTER:

In low volatile coals there are two essentials in providing a coal of low volatile character for the making of coke. First, it must have a certain chemical composition, and then, even if it has that chemical composition, it has to have a property which is known as coking or, more commonly, could be called "caking," (935) and that is the requirement which we have here, when we speak of a low volatile coal, that it meets the chemistry, and also the metallurgical and physical requirements. Our coal has to come from a particular mine. As to whether our low volatile coal set forth on the exhibit might come from any one of the mines at Johnstown, Pa., or must come from a particular mine there, it may come from certain mines that we have of low volatile coal, any of our low volatile coal. Our Johnstown mines were selected because they had the peculiar quality of coal that we wanted. As to whether we had to have the low volatile coal of the quality we have selected here, we want the chemistry at least. I do not say that there is not some other mine that might have a similar composition to the Johntown coal.

By Mr. BALLARD:

We would have to test the mine first to know if it was suitable. (936) We would not know purely by the shipment of it that it was its equal, because of the lack of uniformity of the coal in the seams themselves.

By Commissioner POTTER:

I do not want it understood that we could use any low volatile coal offered, or any neutral coal offered, or any high volatile coal offered, because the two properties have to be considered and studied with reference to the coal.

2712 By Mr. F. BALLARD:

We have had very unsatisfactory conditions in the buying of coals prior to acquiring our properties. We have had experience in the storing of coals. (937) There are two difficulties that lit with coal. One is spontaneous combustion of the coal. The other is deterioration that occurs with the storing of coal, and its losing its physical properties; that is, losing the gases, and oxidizing and making the coal unsuitable for coking purposes. The difficulty of spontaneous combustion is common to a great many varieties of bitumi-

nous coal. Some more than others. I think the higher volatile coals are more susceptible to spontaneous combustion than the lower volatile coals, but they all have difficulties. High volatile coals are one of the parts of the mixture that we use in the making of coke. I have had actual experience with spontaneous combustion for a good many years. (938) Yearly we have gone through it; even in the last 60 days trying to carry as much as a supply of 30 days. We have had spontaneous combustion at our plant at Baltimore and have had it at Bethlehem, and at Steelton, with the coals taking fire and becoming heated up, and it was necessary to remove them. As to spontaneous combustion with a 30 days' supply of coal when stored, we meet this difficulty under those conditions. As to extending storage to many times 30 days' supply, I don't believe that is a practicable way of operating a by-product coke plant. As to the loss of physical properties in storage of coal, coking means caking, a physical property. When it is heated to a certain temperature it glomerates, or it clinkers, or cakes, and occupies a mass instead of disintegrating and perhaps being a powder. It is that quality that makes the big, rough lumps that we know as coke. (939) It depends upon the physical properties of this coal as to just how large the lumps may be. In the blast furnace it is very desirable
2713 to have large coke. You go out and try to select your coal with the idea of making large lump coke, in order to run your blast furnaces in a practical way. The large lump is necessary for the steel business, whereas we often use smaller coke for domestic purposes and sell it. The quality, namely, the ability to cake into large lumps of coke, is the property that is lost by storing. You can keep coal on a stock pile so that you would have a very inferior quality of coke made from it, which would not be suitable for metallurgical purposes. (940) Many of the coking coals, in their exposure to the weather, oxidize, and they have not got the physical properties which they have in the interior part of the seam. To get the coal as nature has protected it and use it quickly is the necessity of a good coking operation. There are certain chemical components which must be avoided in coke which is to be used for steel making. (941) Sulphur is of first importance. If you can not get your tested and known coals and you get a high sulphur coal in your mixture, as an aliquot part, the sulphur in the coal is carried through the metallurgical process in steel making. The next step of the use of the coke is in the blast furnaces. In the blast furnace, with the relatively increased proportion of the [sulphur] in your coke, you get a relatively higher percentage of sulphur in your pig iron. That goes from the pig iron into the smelting of the pig iron in open hearth furnaces in the making of steel, or in the Bessemer process. (942) We make steel rails. In the sulphur composition of the steel there is a limitation upon which engineers will accept steel, so that if you do not meet your requirements in your fuel to begin with, where the large percentage of your sulphur comes from, you get this subsequent addition of sulphur in your steel, and it is unsatis-

factory for the purpose. Secondly, you lose the physical properties of the steel by increasing the percentage of the sulphur in it, so that you do not meet the physical properties of the steel by
2714 additions of percentages beyond what is normally expected of the material. Such being the case, the rails would undoubtedly be bad rails. The limitations put upon them are those of practice and experience, because of necessity in the composition of steel.

By Commissioner POTTER: (943)

There are two elements that are extremely injurious to the steel. They are phosphorus and sulphur, which are contained in coal. To go through with your process and have a larger percentage than is required by specifications gives an inferior steel. That is, it interferes with the hardening elements and the carbon, and manganese, and the other things that are added to it, so that the first essential is extreme purity with reference to the elements of phosphorus and sulphur, which are almost entirely contained in coal. The difference in percentage is in the coal. The percentage of sulphur in ores is practically negligible, but in coals, even the very purest of them have excessive amounts of sulphur. It is those facts in the composition of the coal that have to be taken into consideration in acquiring your coal properties and providing the coal for the making of the coke and smelting in the blast furnace. (944) As to the size of the coke, the burden-carrying capacity is important and also another feature in the use of the coke. The smaller the coke, the more easily the furnace becomes blocked or congested, so that it is liable to become frozen up on you, and it becomes a very difficult operation. The operation of running a blast furnace is the blowing of air through a mixture of coke, ore, and limestone, so there must be interstices of sufficient quantity to permit of that air going through and smelting this material, or else there is difficulty. So that the size of the coke is very important. Storage of coal and the resulting exposure to the air interferes with the physical properties of the coke you would make; that is, the size of the coke.

2715 By Mr. BALLARD: (945)

Q. (By Mr. FREDERIC BALLARD.) I picked rails as typical for the question I wanted to ask you, to illustrate what you have said is the fact, that if a thing like sulphur gets into the blood of the steel-making process, it will come out at the end and damage your product. Is that true of things like switches, frogs, car wheels, and bridge steel?

A. That is true in all the steel you produce. It is impossible metallurgically to get rid of your sulphur.

In ordnance it is even very much more important, because in an ordnance steel you can not have your phosphorus and sulphur too low in the steel in order to get the physical properties of it. It is made as low in those elements as nature can provide it. You can not select material of too pure a character to make ordnance steel.

The success and the physical properties and ballistic properties of all the steel depend upon the purity of that steel, which comes out of the phosphorus and sulphur content in it. Ordnance is the acme of steel making. (946) As to cutting off any coal that we can use, "down to a certain degree," it means the shutting down of our ovens and the curtailment of the operation of our blast furnaces. The shutting down will damage the ovens and occasionally result in the loss of your ovens, the falling in of them through the contraction of the brick. The next step beyond the coke oven is the blast furnace. The blast furnace requires a daily tonnage of coke to operate, and any curtailment of that operation means a serious condition, because the blast furnace is designed and built and has been found necessary to operate continuously. Interference with that means many ills to the blast furnace and its subsequent operations. (947) As to storing the coke, that is an enormous requirement and that is hardly a practicable way of operating a blast furnace. As to whether the lumps break up, the answer is "yes." They are bound to disintegrate with weather conditions. That is not a satisfactory way of operation. As to a situation in which our whole plant would go upon partial operation because of failure of the proper coking coals, we have had such an experience, a curtailment of operations, due to that. This exhibit, showing the total cost of our steel plants, gives some idea of the amount of property which may be forced into partial idleness through those causes.

2716

(948) With respect to Exhibit No. 20, for each person thrown out in a coal mine here you would have five or six men thrown out in the steel plant, for each ton of coal, probably, or for each man that is now employed there, and you have the communities in steel plants, the large communities which you have not got at the coal mines, with their development of commercial conditions in those communities, so that probably twice as many people are affected, business people. The steel worker is a man who is trained in some one particular branch of the business and he does not move about. He is usually a man that has his home in the community (949) and he waits for the starting up of the plant again. He is not of the Romany type. We sell gas from the by-products for public utilities in three cities—Baltimore, Harrisburg, and Bethlehem. If our by-product coke ovens were shut down, that supply of gas would be naturally cut off or curtailed. As to purchasing coal prior to our purchase of private cars in 1920, first, we had difficulty in securing coal in the market to meet our requirements of coal. Even when we have made contracts for coal we were unable to get our tonnage of coal, because the proportionate amount of coal which you would have would not be delivered to you. (950) You can not get satisfactory coal in the spot market, because in the spot market you are provided with the cats and dogs of coal that is available, that might be suitable for steam purposes, but not for metallurgical purposes. We have had very unsatisfactory experience prior to our securing mines, and subsequently cars, in the operation of our coke plants. It was ex-

tremely bad in 1918 and 1919. We had a good deal of difficulty in that for a number of years prior to 1920. We have a traffic department in our company. It is true that we had proper
2717 coals at coal mines which we owned, that we were ready to produce the coal, that we had plants that were designed to use and anxious to use those coals, but that we could not get our coals from our mines to our plants. (951) That became a traffic problem, so we asked the traffic department how they were going to bring us the answer, to provide us with our coal. There was only one solution to it, to provide ourselves with our own cars. That was done. Since then we have not had such experiences as those I described. It has been reasonably satisfactory. I do not know anything about the assigned-car rule. I know that the solution of the transportation department was to provide us with private cars so we could operate our mines, (952) and that has been a reasonably satisfactory solution.

Cross examination by Mr. BROWN:

I have been working for this institution thirty-odd years and operated twenty-seven years without private cars. These cars were bought in 1920. We had serious difficulty in securing coal for our plants for a number of years. As to when we discovered that we had to have private cars, we had the experience for several years. (953) It culminated in 1920, when we bought the cars. As our by-product and gas plants are conducted, we have to have our coal when we want it and as we want it, and the only way we think we can get it is by private cars. That is the deduction we make.

By Mr. LIVERIGHT: (954)

We do not use bituminous coal for steam purposes, but use instead anthracite. We have something less than 4,000 private cars. Bethlehem bought one thousand in 1920, and the others were acquired by plants whom we have acquired in the past year, the
2718 Lackawanna Steel Company and the Midvale Steel Company.

(955) I testified to the necessity of a uniform quality of coal. It is true that in the same mine, for instance, our number one, two, three, seven, and eight, at Heilwood, there is quite a considerable variation in the chemical composition of the coal. In some place in that particular mine there will be a low sulphur content, particularly, and in another place in the mine a considerably higher sulphur content. We mine all that coal and ship it out, whether it be high quality or low quality, to some of our plants which use coal. (956) We take that coal and if it equals the composition, we wash it to meet the chemical composition which we believe is imposed upon it. That washing has been done for years at Steelton. In using it for Bethlehem, we prepare that coal so that it meets our limitations so that we can mix it with lower sulphur coal. As to whether it would be practicable to wash other coals of

the same general make-up, quality, and characteristics from other mines, the answer is "Yes." It is practicable to wash coal. At times we have washed all of that coal from the Heilwood mines, depending upon its chemical composition, and as to how it was showing. It varies from less than one per cent up to one and three-quarters per cent in sulphur. One and three-quarter per cent sulphur content is regarded as pretty high. (957) That is the reason we wash it. As to whether we could wash the coal from the main line the same way, we could, but it might not be coal that we would be interested in. The coal at Heilwood turned out to be an unusually good coking coal in its physical properties. That was the reason it was selected, and when the Heilwood mines were originally bought the chemical composition of those coals was extraordinarily good, but as time went along, they became not as satisfactory.
2719 That is the reason additional mines have been purchased. (958) The mines have not deteriorated. The coal seam has shown a variation, having gone down in quality. There have been compensating conditions arranged for that, that is, for its purification. One of the very lowest sulphur coal we get is off the Morgantown & Kingwood, what was known as the Elkridge property originally, a coal very low in sulphur and one that, very fortunately, can be used in itself for the making of coke. That is what is known as neutral coal. As to the meaning of the word "neutral coking" as applied to Heilwood and Glenside mines [on the exhibit], the word "neutral" in our sense means a coal that does not need to be mixed with either low volatile or high volatile coal to make satis-
2720 factory coke. (959) Whether it is the most desirable coal of all depends upon its other physical properties, composition, and things of that sort.

By Mr. F. BALLARD:

So far as volatility is concerned, it is neutral.

By Mr. LIVERIGHT:

As to how often we were shut down to any considerable extent because of the failure of coal supply in the year 1919 I cannot answer the number of times, but I know that the experience prior to 1920 was very serious with numerous shutdowns. We have had partial shutdowns of our plant. As to where we were shut down, we were at our Bethlehem plant. I don't know that I can give the periods specifically. They were sufficient for us to take the next step in the operation before our board of directors. Besides Bethlehem we were shut down at our Sparrows Point plant. (960) I would not want to say specifically what that time was. As to whether the total shutdowns on account of coal suply in 1919 at all our coal operations amounted to 10 days, I would not like to name the number of days. I have not any statistics to show that. I know they were sufficiently serious, in fact, to take the next step in the operation. As to whether we used our privately owned cars

exclusively for the service of our plants and mines, we have sold some coal but a very small quantity. We are not interested in a commercial business as a general policy in the selling of coal. As to whether we sold a very considerable quantity in 1921, I don't know the tonnage we sold that year. I know we have sold coal through Whitely & Fotish. (961) I cannot tell you the amount. I have no record here of the contracts for those coals. As to whether it amounted to as much as 250,000 tons, there might have been 250,000 tons sold over a period of time.

By Mr. F. BALLARD:

2721 It is our policy to be selling coal. I do not know definitely as to the 250,000 tons.

By Mr. LIVERIGHT:

I am in charge of the mines and the mining. (962) I do not sell the coal. I operate the mines. I know that there was some coal sold. As to whom and how it was shipped I would not know. I do not recall any particular tonnages that might have been sold in 1922. I believe there were some small tonnages in the commercial market. There may have been a small tonnage sold in 1923. I don't know whether that was from the Central Pennsylvania district. I don't know whether any was sold in 1920 in the commercial market. I cannot answer as to any specific tonnages that might have been sold. It is not our policy, in a broad way, to sell coal commercially, because we require all these coals for our own use. (963) I would not say that the mines supplied by these privately owned cars work nearly all the time. They are operating today probably between 50 and 60 per cent of the time. That is because the steel business is dull, and we do not have the requirement at our own properties. I do not know of any tonnage of coal going out to any market today. I don't think the coal mines worked pretty nearly full time in 1922 or in 1921. As to 1920 I do not recall. I have no reason to know (964) whether our mines operate to a great deal fuller capacity than the neighboring mines that do not have private cars. I keep no record of what the other coal mines are doing on their branch lines. I can tell you what we do, but not what other people are doing. I get to the mines quite occasionally. As to car supply we had in September, 1922, I cannot answer. I do not know about the car supply at those mines in any period. That is not my responsibility or under my jurisdiction. I cannot answer as to how we were running in November, 1922, as to whether it was two thirds time or what it was. (965) I cannot answer that question as to December, 1922, and Jan-
2722 uary, February, March, and April, 1923. I would want some statistics to show that. I don't think there is anybody here for our company that can answer that.

By Mr. GREEVER:

As to whether the abnormal conditions following the war were really the cause of our having to buy private cars, my answer is

no. The reason why we bought the cars prior to 1920 was that we had considerable difficulty. I have mentioned 1918 and 1919. It was very acute during that time. The war ended in 1918 and began in 1914. As to whether war conditions had changed things so that we deemed it wise to buy private cars (966), ever since we have had by-product plants, and the first plant went into operation as far back as 1912, we have had difficulty in making the by-product coke, especially for our requirements. It has been the compounding of conditions that have occurred during that period that has made it essential to buy coal to meet the requirements of our steel business. I am not indicating by my testimony the loss we would sustain. I am trying to indicate that it is a necessity of daily requirements of coal to operate a by-product oven. Without this coal you do not operate your coke ovens, your blast furnaces, and your steel mills, and that means a loss. (967) Every manufacturer who uses coal as fuel in his business needs coal each day, and if he does not get it he sustains a loss, because he has to shut down.

Q. (By Mr. GREEVER.) So that, after all, this question, when based on the line of testimony you have given, is s ıply a matter of comparison between what your loss would be ana what somebody else's loss would be, in case of failure to get fuel; isn't that true?

A. Yes; that is true.

Q. Yours would be very great, while the other man's loss would probably be small?

A. Yes.

It doesn't make any difference what kind of coal it is, if he doesn't get it he sustains a loss. (968) As to whether, after all, this question, when based on the line of testimony I have given, is simply a matter of comparison between what our loss would be and what somebody else's loss would be, in case of failure to get fuel, that it true. As to whether ours would be very great, where the others' would probably be small, my answer is yes.

By Mr. CURRY:

Referring to Exhibit R–22, with respect to gross tons of
2723 coal per month furnished to our plants, I have not got the information as to the tonnage which was transported in private cars and that which was not. In a general way, I do not know whether some of those plants use private cars and some do not. Referring to Exhibit R–19 (970), the cars shown thereon as built before 1920 were purchased by other steel companies whose properties were later acquired by Bethlehem, and the cars did not come into Bethlehem ownership until within the last year. Referring to Exhibit R–22, the original Bethlehem plants, before acquiring the other properties, were Bethlehem, Steelton, Maryland, i. e., Sparrows Point, and Lebanon. (971) As to whether prior to the acquirement of those cars we had to close down our coke ovens because of inability to secure coal, there were a number of times each year that we had to shut those plants down, not being able to secure

the coal to operate. As to whether that was before we got the cars, I don't know the specific times, but that was the history of it. I know when we did close down the silica lining was cracked or broken. We had difficulties at Bethlehem, and also at our Steelton plant, requiring relining of parts of the ovens. As to whether since acquiring these cars the difficulties have been cured by that addition, my answer is yes. Of course, the ovens can be kept to temperature and the operation of them is very much more satisfactory. (972) Since that time we have been able to maintain a more regular supply of coal to those ovens. As to car shortages, I am not familiar with anything of that sort. As to the plants shown on Exhibit R–22, there have been times in which coal has been bought for the plants from mines other than the company-owned mines.

By Mr. F. BALLARD:

We have some long-term contracts under which we have gotten coal from other mines. Our policy is to procure the coal from these mines which we have secured. We expect to be out of the market in buying any coal for our by-product plants. "It is
2724 a gradual development since 1920, in the development of these mines for this coal, for the by-product ovens, and the process of consummation is going through now." (973)

By Mr. CURRY:

The mines shown on Exhibit R–18 are company-owned mines. I am not in a position to state where the long-term contract mines are. There are long-term contract mines of which we are taking the entire tonnage of coal; from what are known as Jamison 20 and Jamison 21 and 22 mines. I don't know where they are located. [Mr. F. Ballard stated they are on Pittsburgh Division, Unity Branch, main line of the Pennsylvania.] (974) Those contracts are output contracts. They were made three or four years ago. They are properties which we examined ourselves and had them drilled to see whether they met our requirements before we made a contract with the Jamison Coal & Coke Company; so we look upon them as being practically a part of our mine operations.

By Mr. F. BALLARD:

The contract is made for ten years with renewal for another ten years, practically a 20-year contract. They are really contracts made for the entire tonnage of coal in this property, practically of 20 years' duration, which would measure the tonnage which was proven up by drilling and chemical analysis and tests being made of it.

By Mr. CURRY (975):

At times there have been private cars put at those mines. Recently there have been no private cars put there. The contracts have been unsatisfactory in that way, with car rating. When we want the coal

we cannot get it, and when we do not want it we get it. As to what are the company-owned mines at which our private cars are placed, and the extent of such placement, our transportation men will answer. I have not made a study of that and it is not my responsibility. As to whether other steel companies similar to ours are able to get along without private cars, I do not know
2725 the history of the other steel companies particularly, except that I believe in a general way they have provided themselves with cars.

By Mr. F. BALLARD (976):

I do not know of any steel company that operates by-product ovens at its plant that does not employ private cars. I have not the statistics.

Redirect examination by Mr. F. BALLARD:

The history of coke making in this country up until about 10 years ago was that the steel industry was operated on beehive ovens. The beehive oven has been acknowledged by the technical world as a very uneconomical way of making coke, and the steel companies have gone to the building of by-product ovens. The steel plants have changed the modus operandi of securing fuel for their blast furnaces. With that change there has followed that one way to get along (977) which existed in the past does not exist to so large an extent now. That is a condition that has been particularly emphasized within the last 10 years, with the growth of the by-product ovens in this country. It is a great economic development that should be continued. It is a very uneconomical thing to be making coke in beehive ovens. It is not our policy to sell coal. Our mines are not running in full operation, but about 60 per cent. That 60 per cent is determined by our needs at our steel plants. As to whether not operating the additional 40 per cent is illustrative of our policy of not selling coal, our cars are on the sidings and are not in use and the coal that is being mined is being shipped to the steel plants. (978) As to these cats and dogs of coal I referred to, they can make steam, and they can be stored. Coal could be stored for steam making, as against by-product operation. As to whether that is the essential difference between an industry (979) to
2726 which coal is coal, and an industry which is a metallurgical process, it is.

By Mr. BROWN:

On our Exhibit 18 the annual rate of production of our mines is 9 million in round figures. As to where we get the remainder of the 11,900,000 odd shown on our Exhibit R–22 as our consumption of coal, that is the maximum operation which we have never reached. That is the requirement we are aiming at and believe eventually we will require for the development of the steel plant. We have not used any such 12,000,000 tons. That is an idealistic condition.

By Mr. LIVERIGHT:

As to whether we could not have sold the other 40 per cent of our coal this summer, if we had wanted to, on account of the market, I am not a salesman of coal, so I can not answer. As to whether I know that in a general way, I do not. (980) Our Jamison contract began, I think, about four years ago and is a 20-year contract for the output of the mines. They haven't any private cars. They have appealed to us to provide them with private cars to operate their mines, and the experience with them was exactly the experience we had prior to 1920.

By Commissioner POTTER:

I think the development of the art of steel making is demanding greater and greater purity of steel, to meet the greater service of the steel in our railroad systems. As to the automobile industry, with high-speed tools, and things of that sort, the special steels all require extreme purity in those elements which are known as metalloids, that is, phosphorus or sulphur, to get physical properties. They must be extremely low, in order to add the "achromium" and nickel and all the elements that have been added to steel to give it extraordinary properties. I believe that we should
2727 conserve the power coals of our country for our industrial development; that it is a mistake to be using our metallurgical coals for steam purposes; that our percentage of that character of coal is so small that we will have, in some future time a day of reckoning for not proper selection of those coals. In the industrial arts the tendency is more and more toward the selection of coal specially adapted for particular uses. (982) That is the tendency now. The composition of steels has been greatly improved in its purity in the last 10 years and will continue to improve by metallurgical processes and studies that are being made, and the selection of the material is the first one that is essential to the business.

JOHN M. GROSS, called as a witness and being first duly sworn, testified as follows: (982)

Direct examination by Mr. F. BALLARD:

I am general traffic manager of the Bethlehem Steel Corporation and subsidiaries. All traffic comes within my jurisdiction, including raw materials from our mines to our plants, and particularly coal moving from our mines to our plants. (983) I was consulted in connection with the purchase by the Bethlehem Steel Company when it first bought private cars in 1920. I was consulted in connection with that purchase. The demand was very intense for transportation, particularly of coal. It was our experience that we could not get the quantity required and could not get the cars to load our requirement of coal, and it looked very much to us as though the serious condition on the railroads was not to be bettered for some time to come. As to whether there was what was called a car short-

age then, there was. We thought it was a condition which would continue and might recur, and we were particularly concerned about it because of this very question of coal, for the reason
2728 that we were afraid of the continued over-development in the coal mines and resulting car shortage for a period of years. (984) That is, with an over-developed industry even an adequate supply of cars might appear inadequate. We feared that. As a solution for this problem of getting sufficient cars to move its coal, to move the company's coal, I recommended the purchase of private coal cars, and they were purchased on my recommendation. I agree with Mr. Buck that we have had a bearable situation since then. We have had a fairly regular flow of our coal requirements, although at times we have had difficulties. I am an officer of our company who knows the use to which those cars are put. The cars are operated solely in the service of the mines which we own in the handling of that coal to our plants. They are not operated in the total output contracts to which Mr. Buck made reference. (985) Generally speaking, we take the output of our mines. The mines covered by Mr. Buck's statement do not compete for a share of any system cars. There are no system cars placed at those mines. (986) As to whether there is an arrangement that our own cars shall be adequate for moving our own coal from our own mines to our own plants, I do not know whether they would be entirely adequate, but we confine the cars to the service of those mines and we do not use them in any other trade. I have had a study made of the movement of many of the raw materials into several plants with a view to determining the relative time in transit in system cars and shipments that may be compared with movements in private cars. As to the traffic covered in this study, we have included raw materials to each of our five major plants now operated by the Bethlehem Steel Company, namely, Bethlehem, Sparrows Point, Steelton, Johnstown, and Lackawanna. (987) Inbound raw materials in the case of each plant are ore, coal, and limestone. In the case of the Johnstown plant some coke has moved from Ellsworth to Johnstown, and that has been included in the study particularly for the reason
2729 that we wanted to get a true picture of the whole situation and avoid what might seem to be any arbitrary elimination. All of the commodities moved in open-top equipment, and the vast majority of the movement is in the same kind of cars as would be available for the handling of coal.

The shipments studied are quite scattered. There were certain specific movements which are not comparable geographically in competition with other specific movements, but on the other hand there are a number of heavy regular movements of system car traffic and private car traffic which afford a very helpful comparison. We covered typical shipping days, commencing in January, 1920, and continuing to October, 1923. We selected typical shipping days in the

months of January, April, July, and October of each of those years. That makes 16 months, and the particular days selected in the most part (988) were on the first and second days of each month, and when the traffic was moving in some cases it was on the third, but rarely past the 15th of the month. We took the first two days in the month on which that particular traffic moved. In addition to that there was also an effort made where large cargoes of ore or heavy movements of coal took place to take 10 cars out of each movement rather than to take 100 cars all at one time. In each case we took the shipping date from the railroad's shipping documents or freight bills, the date of arrival was taken from the records of the plants as to the date of actual or constructive placement. The days in transit were obtained by deducting the date of shipment from the date of arrival. The results were compiled in tabulations which show the average time in transit for each movement. In all, the entire examination covered approximately 10,000 cars, moving quarterly through a period of four years. (989) I believe the results produce a very accurate, authentic record of what is the true fact of the movement in system cars as compared with private cars. The
2730 exhibit was prepared by the most competent people that I could get and has been gone over by expert people with adding machines and comptometers, and I believe it is as humanly accurate as anything can be as to calculations. The volume which I have before me contains the tabulations and results from this study.

(The statement referred to was offered and received in evidence as Exhibit R–23.)

(990) This exhibit is divided into five major parts which cover the five plants. The portion relating to each plant is subdivided between system car movements and private car movements. The system car movements follow the yellow markers and the private car movements the green markers. With reference first to the Bethlehem plant the sheets in the system car section will be found under the first yellow marker on page 62. In taking that page I have not picked out any particularly favorable case. I have taken it at random. Commencing with that page there are 13 sheets which deal with the movement of coal from Davis, W. Va., to Bethlehem in system cars. (991) The distance from Davis to Bethlehem is 294 miles and the route is via the Western Maryland and Philadelphia & Reading. Those 13 sheets represent all but three of the 16 months covered by the study, and that is for the reason that there were no shipments in April and July, 1922, and January, 1923. The shortest time in transit for this movement for the entire period is shown on sheet 64, in connection with 18 cars which moved in July, 1920, at an average time in transit of two days. That was a period of approximately 60 per cent car distribution.

By Director BARTEL:

The longest time in transit for the movement is 3.6 days, shown on sheet 69, covering 12 cars moving in October, 1921, (992) a period

f large car surplusage, according to our records. It might be fairly said that in the movement of these cars from
731 Davis, W. Va., to Bethlehem, the movement has been fairly constant, if you please, over a period of four years, and there re other examples in here to prove that, throughout the great luctuations in transportation and car supply conditions.

By Mr. F. BALLARD (993):

The shortest time in transit for these system cars has been in eriods of car shortage, and the longest time in periods of car surplusage. Turning now to the next green label which covers private ar operation of the Bethlehem section of the exhibit, the only movement of coal in private cars which is fairly comparable in distance with the system car movement just referred to, is the movement from Heilwood to Bethlehem. That involves a haul of 295 miles via the Pennsylvania Railroad and Philadelphia & Reading, and a haul of 308 miles via the Pennsylvania R. R. and the Lehigh Valley. Sheets 1 to 7 cover that private car movement in the 7 months in which it occurred, out of the 16 months study. The shortest time in transit in which the movement was performed was 3 days in October, 1921. (994) That was a period of car surplusage. The longest time was 9 days in April, 1922. That was also a period of car surplusage. The specific comparisons are available between the time consumed by movement in times of coal car surplus, and periods of coal car shortage. For instance, January, 1921, Sheet No. 1, in which the movement was performed in the shortest time, 4 days, was a period of more than 100 per cent car supply. In January, 1923, Sheet 5, a period of approximately 50 per cent car supply, the private car movement required 8½ days, which is more than double the time in transit achieved in the car surplus period just mentioned. (995) I think, as an arithmetical result, this particular study shows that it is twice as long in private car movement under car shortage
2732 conditions, and the system car movement from Davis, W. Va., made its best time in periods of car shortage. Take the Lackawanna plant at Lackawanna, N. Y. The system car shipments to that plant are shown on the sheets following the fourth yellow marker. At the top of the page appears "Lackawanna plant, Lackawanna, New York, railroad system cars." Sheets No. 1 to 15 show the movement of coal in system cars from Warren, Pa., to Lackawanna, N. Y., which is a distance of 236 miles over the Buffalo, Rochester & Pittsburgh Railroad.

2733 (996) October, 1920, is the only one of the months in which this movement did not occur. The shortest time shown for the movement is 2.4 days occurring in October, 1923, sheet 15, whereas the longest time is 5.2 days, occurring in January, 1921, sheet No. 4, and both of these months fell during car surplus periods. In all other months, including the car shortage months, the time of movement fell between those two extremes, namely, in April, 1920, it was four days, in July, 1920, 3.4 days, in October, 1922, 4.3

days, and in January, 1923, 3.3 days. That is the time consumed by system cars moving in months which were in periods of car shortage. It seems to me these figures certainly indicate that the movement of system car traffic is not neglected in favor of the private car shipments in times of car shortage. If we go to the private car portion of the exhibit the most comparable movement found is coal traffic from Ellsworth and other mines in the Ellsworth group to Lackawanna. This movement ranges from 305 to 313 miles from different mines in the group. That is substantially longer than the system car movement to Lackawanna that I have referred to but if you will compare the results you can make allowance for that difference. (997) It is the closest comparison available. The months of October, 1922, and January, April, July, and [October], 1923, are included. We have no records of shipments from the Ellsworth mines prior to our acquisition of the Lackawanna Steel Company, which was consummated in September, 1922. The figures for the five months I have mentioned cover both periods of car shortage and car surplus. The fastest movement occurred in October, 1923, sheet 11, consuming 3.6 days in transit. That particular month was a month of car surplusage. The
2734 slowest movement was 7.2 days which occurred in January, 1923, sheet No. 13, which was a month of approximately 50 per cent car supply. The movements for the other months comprising both periods of car shortage and periods of car surplusage fall between those two extremes. Here again it seems to me the facts show that private cars as used for the movement from the Ellsworth mines to Lackawanna are not given preferred movement in times of car shortage and that their time in transit perhaps is less favorable than that of the system cars running from Wehrum [Warren] to Lackawanna, even after due allowance is made for the difference in distance.

(998) These comparisons that I have cited are typical of a great number of comparisons between system car movements and private car movements which can be made all through this exhibit. Some of them are good. Some of them are bad. I have not tried to make them either one or the other but have tried to pick at random through a record of four years something which would give the actual facts as to the movement of the two classes of traffic. There are lots of queer fluctuations as to the time in transit of particular cars that show up in this exhibit. I make no effort to explain that. In the fly-leaf of this exhibit I show a general summary of a typical year. It seemed that a fair measure of the general showing of this exhibit might be contained in a weighted average made for all of the 1923 cars covered by the study, which is shown at the foot of the first page just under the cover. The year 1923 was selected for the reason that it was typical of what is the Bethlehem plant (999), if we can call it that. We had no records prior to our acquisition of the Lackawanna Steel Company, in September, 1922, and prior to our acquisition of the

fidvale Steel & Ordnance Company, in the spring of 1923. The year 1923 represents our group of plants as now operated
735 under common management. It is true that the first ten months of that year include both months of car shortage and
ar surplusage. I would regard it as a typical year.
The total number of 1923 movements included in this study is ,710 of which 1,947 were in private cars and 2,763 in system cars. The result of the computation shows that the system cars had a speed of 60.2 miles per day and the average length of haul was 03.9 miles. The average speed of private cars was 60.8 miles per day and the average length of haul was 249.3 miles. The speed of the system cars and the private cars moving similar traffic was the same although private cars were utilized for a substantially longer haul which under ordinary circumstances (1000) you would expect might show a higher speed. These figures of average miles per day are not computed upon the same basis as the published figures that are sometimes seen for all traffic of the railroads. They are two different computations. The figures that the railroads ordinarily use would include the loaded and the light mileage, both ways. They would also include service through the terminals. I think, for instance, under the demurrage rules you have free time and they would include such delays as that. That is, the divisor of days is days in loaded movement, days empty and days at terminals, namely, days on the line, whereas I have simply used here the days from the billing date to the placement, actual or constructive. (1001) I do not know any reason why the railroads should speed up private car traffic as compared with system car traffic. On the contrary there are reasons why system car traffic should be speeded up as against private car traffic, for the reason that there is a charge of $1 per diem on all foreign owned cars which are on the line, and which are supposed to be returned to the owning road. Every unnecessary delay to those
2736-2737 foreign system cars costs $1. The basis of compensating the owner for the use of the private cars is entirely a different one, that is, one and one-half cents per mile, and there is no particular financial incentive why a private car should be hurried, as it is not a question of time at all. There is no financial premium for the slow movement of private cars as far as the railroad is concerned, or for the fast movement for that matter. (1002) It seems to me there has been quite a good deal of confusion in some of the testimony as to more or less description of the movement in solid trains of private cars. A solid train of private cars may reach a classification yard, and be put through, or I should say perhaps around, such a yard on a run-around track without any working of any sort, without classification of that train. It goes to a division point and gets its power and goes on. That situation has absolutely nothing to do with the ownership of the cars. System cars are handled in identically the same way provided they are in the same trains. Such train is already classified and again

putting it through the classification yard would be a pure waste of transportation. (1003)

By Commissioner POTTER:

As to whether in actual practice between points of origin and points of destination system cars ever move in solid trains as private cars, they do. For instance, I think the ex-lake iron ore probably moves to a greater extent in solid trains than almost any other traffic. That is because it arrives at the lower lake ports in solid cargoes, eight to ten thousand tons in a cargo, and that ship requires very quick turn-around to get dispatch, particularly in the heavy season of lake ore movement; so that that ore comes in that way and goes in four solid trains to destination.

2738 By Mr. F. BALLARD:

Those are system cars. I do not recall any instance in which iron ore moves in private cars. Imported ore in large quantities furnishes another example. The Bethlehem Corporation brings ore in ships of 20,000 tons at a time. There are 400 cars to one destination in solid trains and those trains would never be yarded.

By Commissioner POTTER:

If there were enough system cars to handle our coal from the mines to our plants (1004) they absolutely would move in solid trains the same as the private cars do now. It is an operating principle that is involved, no matter what kind of cars, whether they are private or system cars. If in the case of the Bethlehem Company, for instance, you can regulate your flow of materials and find it possible to move them in the largest quantities—the railroads solicit that and ask us to load the cars to their fullest capacity and move them in big units as far as possible—it is very desirable. It is a simplified movement by solid trains to one destination and is in no sense anything that looks like preferred transportation. On the contrary if you take a hundred cars, say, so classified, considered a simplified movement, they call for less than their share of transportation rather than more and make less use of the carriers' locomotives, tracks, and yards. They do not go into the terminals as the word "terminal" is commonly used. They are loaded on our tracks at our mines and they are operated over the railroad with the least use of its property and they go into our tracks at destination. (1005)

By Mr. F. BALLARD:

I have made a study to determine whether the so-called car short-
2739 ages are necessarily caused by locomotive shortages or other transportation disabilities. It is contained in information which I have gotten from the published reports of the American Railway Association. It is a statement by weeks commencing with August, 1920, and ending with the last week of September,

1923, showing certain conditions which prevailed in the Alleghany district, as that district is used by the American Railway Association.

(The statement referred to was offered and received in evidence as Exhibit No. R–24.)

(1006) The Alleghany district referred to in this exhibit includes the Pennsylvania and the Baltimore & Ohio Railroads, which are the railroads upon which our private cars are loaded, and, generally speaking, it includes the most important carriers involved in, I should say, almost the private car branch of the case. It certainly includes the most important carriers involved in handling our products. The carriers are shown at the head of the exhibit. I have taken from the reports mentioned figures showing, as to each week covered for all of the carriers included in the district, first, the prevailing percentage of coal car distribution, second, the total coal loaded in cars, and third, serviceable locomotives stored. All of the exhibit refers to the Alleghany district except the last column, (1007) taken from the weekly reports of the United States Geological Survey which shows the production of bituminous coal of the entire country for each week involved, in net tons. As a general comment on this statement, there were a number of serviceable locomotives stored throughout the entire period of the last four years, periods of acute car shortages as well as periods of acute surplusages. In the car shortage period from August to December, 1920, the weekly coal car loading in the Alleghany district was close to 65,000 cars and the entire output for the country was close to 12,000,000 net tons yer week. I think it can fairly be said that both of those figures are above the average. There was no shortage of tracks
2740 or yards to handle that peak movement for the reason that it was, in fact, handled. As to whether it might be handled but still be very slow in handling, I do not believe it could be true from these figures for the reason that the volume of business handled indicates that it could not have moved slowly. It is handled week after week, and if you follow this record (1008) you will find that the figures do not fluctuate in a way which would indicate dead stop or congestion.

By Director BARTEL:

As to whether that was on account of priority orders in effect during this time as to this movement, I can not answer that, but this records runs through the year with the peak periods, and as I recall it, the priority orders were only in effect, perhaps, during the war or the latter part of it. They were in effect during 1920. Whether priority orders or something else, the traffic was moved. The commission's orders giving preference in priority to open-top cars for the movement of coal might indicate why they moved this peak load. It might be that during this particular period there were serious congestions, (1009) but the second sheet shows that during the entire year 1921 there was a great surplus of cars and the weekly loadings

in the Alleghany district rarely reached 50,000 cars and the national output of coal did not average 8,000,000 tons per week.

By Mr. F. BALLARD:

That is through the entire calendar year. If you consider 1920 as against that, it is immediately obvious that there were also cars enough to handle the peak load, and the car supply was short only in the sense perhaps that every mine in the overdeveloped coal industry could not be given all the cars it wanted.

By Director BARTEL:

I realize that in 1920 the commission impounded the open-top
2741 cars for the coal traffic only. After the termination of the coal strike in 1922, the carriers again approached the handling of the peak movements, at first with a so-called car shortage, and later with a full-car supply. (1010) It will be noted, however, that despite the impounding of the open-top equipment that throughout the year 1922 there were serviceable locomotives stored. (1011)

By Mr. F. BALLARD:

The carriers approached the handling of peak loads of coal after September, 1922. (1012) The percentage of coal car distribution went down and the production went up. That indicates heavier loadings.

By Director BARTEL:

As to whether that indicates inflation of mine ratings, undoubtedly it would increase the overdevelopment of the industry.

By Mr. F. BALLARD:

As to "serviceable locomotives stored," I have asked several of the railroads and the American Railway Association what that meant. It means the storing of locomotives which are "white-leaded," in which the fires are drawn and out of which all the water is taken. They are locomotives that are wholly out of service. It does not mean in any sense locomotives that may be retained at division points (1013) and usually steamed up for emergency purposes. It is in addition to all that kind of power. I do not interpret this exhibit to mean that there is never such a thing as a locomotive shortage. Under emergency conditions, such as the shopmen's strike, there might very easily be a locomotive shortage. I should say from what I have heard here that such a situation might perhaps call for the emergency power of the commission being exercised, but except in such emergencies I think that the exhibit demonstrates that a car shortage does not imply locomotive shortage.

2742 By Director BARTEL:

As to whether the stored locomotives do not necessarily mean locomotives ordinarily used to handle freight traffic, I have taken this report from a compilation of the American Railway Association and they show passenger, freight, and switch locomotives.

s to whether in this particular period they would not include the nall type locomotives not ordinarily used, I don't know that.

By Mr. CURRY:

As to whether I examined the comparison of locomotives serv-ceable during this period, I glanced over them but I can not recall hem. (1014) I can not tell what per cent of the locomotives that were generally in service were in service during this period. Be-cause locomotives were shown as "stored" my inference is that there was no locomotive shortage. My inference is directly from this ex-hibit that more cars, if they had been loaded, could have been han-dled; that a car shortage does not mean a locomotive shortage, nor does it mean a shortage of tracks or yards.

By Mr. F. BALLARD:

Accepting these figures as accurate, I presume there could be an acute locomotive shortage in spots.

Q. (By Mr. F. BALLARD.) And, of course we know there were?

A. Yes.

By Mr. F. BALLARD:

I have given consideration to the effect of the present order of the commission upon us if it is enforced. The best way to illustrate that is by an example, perhaps, of a mine. We assume that the car supply is 50 per cent, and that the rating of any given mine
2743 is 100 cars. (1015) That mine, under system cars, will receive 50 cars. But if we assume that is our mine with a rating of 100 cars, and we have 100 of our private cars ready to be placed at that mine, under the decision of the commission, we assume that we would only get 50 cars at that particular mine. The other 50 cars would be idle. The next day, of course, that reducing con-tinues until we assume the effect of the commission's decision would make idle half of our cars, provided the percentage was constant. All other private cars would be affected the same way. The owner-ship of private cars is approximately 30,000 in number. (1016) That would take out of service 15,000 coal cars.

By Commissioner POTTER:

Taking our Bethlehem situation, our bituminous coal comes from a distance. My statement shows that we use approximately 85,000 tons a month at Bethlehem. Whether that in round numbers is 6,000 tons a day is dependent upon the rate of operation, of course. In times of car surplus, or when there are no car shortages, the rail-road would be able to take care of 6,000 tons a day. If it be assumed now that we have no private cars and a car shortage develops, and there is only 50 per cent car supply available (1017) our coal deliv-eries to us at Bethlehem drop to 3,000 tons a day. My life becomes very unpleasant. As to getting that other 3,000 tons, there would be one of several alternatives. One would be to go out in the open market and buy that coal, with the result that we would probably

secure unsatisfactory coal. We might be put into the peak market for prices. The other alternative would be to develop our own mines, if it were possible, to such extent as to raise the rating in the production, or else buy other mines, and increase or over-develop the industry. In either case you would pyramid your demand for system cars. As to whether it would be feasible for us at the
2744 beginning of the year to make contracts with other coal operators who are producing coal satisfactory to us, under which contracts we would be given the right to use our own coal during the periods of dull times, but to take their coal during periods of business times I should not regard that as feasible. Of course, the first thing I think about (1018) is the difficulty of securing the proper kind of coal, which I hear a great deal about. As to whether, contracts being unfeasible, we would be forced for half of our requirements on to the spot market at a time of high prices and coal shortage, my answer is "yes." At the same time our own mines developed to meet our requirements and the balance of our steel operation would remain idle, and our miners would drift away to other operations. It is to be borne in mind all the time that we compete with no one. It is our own coal. We hurt no one, if we should have our own private cars. As to how, with our mines out in Pennsylvania and our steel plant in Bethlehem, we are going to get the coal in the spot market, well, I am not a purchasing agent, but I should judge that you might have the greatest difficulty in getting it. As a matter of fact, I can conceive of periods when you could not get it at all. The fact remains, as an economic question, that if you did get it on such market (1019), and if there is a peak demand for coal, you undoubtedly have to take it from somebody else, and I fancy you would pay a pretty good price for it in such case. As to whether the mines having desirable coal would be the ones which would be apt not to have sold their product and would have coal available for that time of shortage, I can not think of such a thing. My inference would be that we would be forced not only on to the spot market but on to a spot market for inferior coal and at high prices.

2745 Cross-examination by Mr. BROWN:

I think it is an absolutely fair comparison on my Exhibit 23 to compare movements of coal into our plant in our private cars with movements of other raw materials into the same plant. You will find some discrepancies in that book which show very varied movements, but those are the facts. (1020) As to why, if it is a fact that we can get as expeditious movement in system cars as in private cars, we got our private cars, we got them because we could not get sufficient cars to get a steady flow of coal, based on our requirements, every day, 365 days in the year. Our showing that system cars moved substantially as fast as the private cars over the system to these plants has absolutely nothing to do with car supply. That is movement. That is service. I showed that the private cars

moved approximately at the same speed as the system cars for a greater distance.

By Mr. F. BALLARD:

We bought our private cars to get more cars.

By Mr. BROWN:

A steady and constant movement is a thing that we will always ask for, even in such a commodity as iron ore in system cars. We must have iron ore steady and regular, (1021) and we get it that way in system cars, by means of cars that come from the lakes, which would otherwise return empty, having gone up with coal. At times in making our outbound shipments from our mill we undoubtedly use cars that would be suitable to load coal. In these days solicitation is more active than I have ever seen it. We are importuned to do that particularly, to run cars under load that would otherwise be empty. When they get to destination they are available for
2746 the shipment of coal. As to cars which could be used for shipping coal, but which we use for shipping outbound, there are very few of them. Most of the cars we use in the steel business are what are known as mill-type gondalas. (1022)

By Mr. LIVERIGHT:

My Exhibit 23 is a study of loaded cars and does not show anything about the return movement of the empties. As to whether the return movement of the empty private cars might be more rapid than the return movement of the system cars, I can not think that it would be so. That point never occurred to me, but I imagine it would be the same, because our particular effort is to turn these cars out in solid trains for convenience of movement and get them back in solid trains. I do not know what effort is made to get back the unloaded system cars to the mines of the owner who does not have private cars. I would not know that, because that is a railroad problem.

By Commissioner POTTER:

If, over a given period (1023), we had the same loaded movement of private as system cars, and if, on the return empty movement we had regularly a slower movement of system cars than of private cars, the obvious thing that would happen would be that we would be getting less and less cars at the mines. The cars rotate with regularity. If the return movement was slower than the loaded movement, the mine would be hurt. If it was faster, we would have the interested railroads on our back to stop feeding them empty cars.

By Mr. LIVERIGHT:

As to whether a system car coming from one point under load would come back to another point, whereas our cars go
2747 forward under load and are returned right back to ourselves, I would not quarrel on that. That is purely railroad operat-

ing. (1024) As to whether our cars coming back in bulk will not move back to the mines faster than those scattering cars going to perhaps 50 different places, my testimony has been that solid trains are in a class by themselves. That is in no sense preferred service. As a matter of fact, a unit like that demands less transportation than it could demand. My sheet No. 68, "Bethlehem plant, Bethlehem, Pa., railroad system cars," refers to the movement from the Davis Coal & Coke Company, Davis, W. Va., to Bethlehem, Pa., 2.3 days. I recall the figures submitted by witnesses for our company about investment in plant of $408,000,000 at Bethlehem, Pa. (1025) As to whether I have made any study of any movement of coal from Davis, W. Va., to Bethlehem, Pa., to the fellow that only had $40,000 invested in plant, my answer is "No." As to whether the movement might be different in the two cases, I don't know. Our coal from Davis, W. Va., to Bethlehem moves up over the Western Maryland Railroad via Shippensburg, I think, and then over the Philadelphia & Reading. I don't think it moves in trainload lots. I can not tell specifically on what days it moved in trainload lots and what day it would not. I assume that in some cases it has moved in trainload lots, but I would say in the majority of instances that it does not. (1026) I do not recall that in many instances our system cars went up in trainload lots from Davis, W. Va. I don't know how many cars a week we get from Davis. That was an old contract and in many cases part of that coal comes to Bethlehem and part of it may go to Sparrows Point. This supply does not always come to Bethlehem. Some shipments may be made to Sparrows Point from the Davis mine, and some to Bethle-
2748 hem, dependent upon our requirements and mixtures. I don't know whether it would all leave in the same train and split at some junction point. (1027) As to whether—taking my sheet No. 1 showing "Bethlehem plant, Bethlehem, Pa., private cars," and the movement from Heilwood, Pa., to Bethlehem, in four days, I have compared the shipments in the system cars from Heilwood over the Pennsylvania Railroad, or other connections, to Bethlehem, Pa.: this study contains many instances of our movements. Some of them are good and some of them are bad. I have had them put together, and they are the facts, all of them. After careful study it would be a simple matter to one who is interested in that to compare the movements. (1028) I have not investigated how long it takes to move a car from some mine other than ours at Heilwood to some consumer at Bethlehem other than the Bethlehem Steel Company. I do not know. The thing that I am interested in is Bethlehem Corporation tonnage. As to whether it is fair to compare a shipment in a system car from Davis, W. Va., to Bethlehem with a shipment in a private car from Heilwood, Pa., to Bethlehem, it is approximately the same distance. Whether there are any other features of the situation that are comparable other than distance, I do not know.

By Mr. CURRY (1029):

The Heilwood mines are on the Pennsylvania Railroad and the Davis mine is on the Western Maryland. There are two railroads involved in each movement. As to whether I investigated to see whether the car-shortage situations and service conditions were the same at those two points, the point I made in comparing those was that the Allegheny district includes the Pennsylvania Railroad, the Baltimore & Ohio, and the Western Maryland, and when I made reference to those particular cases I made reference to the car shortage condition, the car distribution condition on those dates.

(Further cross-examination was postponed.) (1030)

OCT. 27, 1923.

2749 CHARLES M. SCHWAB, called as a witness, and having been duly sworn testified as follows: (1031)

Direct examination by Mr. CRAVATH:

My address is New York City and I am chairman of the board of directors of the Bethlehem Steel Corporation, having been chairman of the board, or president of that corporation, 21 or 22 years and having been connected with the steel business 44 years. The first 15 years of my life was devoted as an engineer and works manager. I then became connected with various works in Pittsburgh, and then president of the Carnegie Steel Company for five or six years. After that I was president of the United States Steel Corporation for three or four years. I then purchased the Bethlehem Steel Company, and have been in control of that property ever since. (1032) I have had a wide and long experience on what might be called the practical side of the steel industry. In explanation of what led up to the purchase by the Bethlehem Company of its own coal mines and its own cars, one of the most economic developments in the steel industry in recent years, within the last 20 years, was the utilization of the by-products of coking coal. Those by-products could only be utilized at the works because at the coal mines there were no uses for gases and by-products of that sort. Our own method of making coke by the beehive oven method was to coke the coal near the mines, because it saved large tonnage of transportation, the coke being less tonnage than the coal to the works. To run those beehive ovens at the coal mines it was only necessary to have your larry cars that ran direct from the coal mine over the coke ovens, and dump the coal into the coke ovens. The coke was then transported to the works in

specially designed coke cars or coke racks, as they were called,
2750 and were sent back and forth (1033) between the coke ovens and the works as the product required. Then came the development for using coal in the so-called by-product ovens, which was one of the great national economies that we had in manufacture. This method of making coke was a scientifically devised, advanced method that required just as advanced knowledge in the business as the method. In other words, the character of coal used, its coking

qualities, its physical characteristics, and all of those qualities, had to be considered with great care to make this coke from by-products ovens available for immediate use in the blast furnaces. The result was that coal mines had to be selected that had these qualities, and it was rarely that you would find one mine that would do it. It had to be mixed with coal from other mines to get the desired result. I am informed by our managers that a very small percentage of the mines examined was available for that purpose. One of the great things in steel making and iron making is regularity. Fixed formulas for doing things are not always practicable. One of the greatest inventions in the steel industry was the so-called Jones mixture, without which no steel works can run today, and that had as its aim the regularity of the products to be manufactured. (1034) There is no greater element lending to regularity than the regularity of the fuel which is used in the blast furnaces, because the most deleterious things in steel are sulphur and sulphur gas from coal or coke that is used, so that it is very necessary for economical and practical operation to have regularity. Regularity could only be obtained by using the same materials in the same way, regularly. In other words, you might take coals of the same analyses and put them in the coke ovens and get widely different results, and therefore, if arranging that mixture of given qualities would give the best results, it was highly es-
2751 sential that that condition be adhered to. When we started at Bethlehem, we did not have our own coal cars. The war came on and there was a tremendous amount of coal produced. I remember Mr. Buck and our managers coming to me and insisting that we could not run our steel works or blast furnaces successfully unless we could get our coal with the same regularity from our mines to our by-product ovens that we were formerly able to get with our beehive ovens that were located at the mine. I also remember, as I always remember things where large sums of money have to be furnished, that I argued very strenuously that we might avoid this expenditure at this time (1035) when costs were double what they ought to be. But they were so insistent that it was necessary that I finally consented to this very large expenditure for the purchase of cars at nearly double the price, they pointing out that there was no possible return upon this investment in these cars, and that the allowance given us for wheelage by the railroads would barely keep them in repair, but that the advantage to us was economically a necessary one; that we could not make steel without regularity of cars to transport our coal from one place to the other with regularity. At our works we make high qualities of steel and we specialize upon that. We have made more than half of all the ordnance steel that the Government has ever had. We make all of these high-grade special steels, and it is perhaps more important to us than any other steel manufacturer to get quality and regularity. In these advanced days of steel making quality is becoming more

important each day, and in my opinion it would be utterly impossible for us to depend upon service other than our own service for the natural and personal economic method of conducting our works, by either quantity or quality. I regard the cars that transport coal to our coke ovens as just as important a part of our manufacturing establishment as the rolling mill that rolls the ingot after it is made, or the hearth (1036) that converts the pig iron into steel, or
2752 any other branch of the business. It is one step in a great process that must go along uninterruptedly. By-product coke ovens can not be stopped. They must run along regularly. If you charge them one day and let them wait 24 hours before charging them again, changing the temperature conditions, it will give you irregular coke. My purpose in coming here to-day was not to in any manner give you any detailed statement as to these conditions, but with 20 years' experience as a metallurgical engineer and manager and 20 years in the conduct of large business of this sort, keeping in touch with that part of it, to assure the commission with all the earnestness that I know how that it would be a step that I do not know how we would overcome, if we were unable to conduct that part of our operation as we do any other link in the chain of our manufacturing process. Concerning the cars which transported the coke from the beehive ovens, and which I spoke of as being coke racks, they were wholly different cars. They were not available for any other purpose but coke transportation. (1037) When there was a shortage of cars in the coal industry, that in no way affected the supply of coke cars to transport the coke from the beehive ovens to the plant, so that the problem with which we had to deal a few years ago did not exist in these days. As to the necessity of private cars for our coal supply, and not necessarily for our supply of limestone and ore, limestone and ores can be stored, and we do store them every season without any ill effects, while coal can not be stored without ill effects as to its cooking qualities. Coal deteriorates with storage. There were certain inherent qualities that some of our scientific people could perhaps better explain than I, as to why, if they know, which I am doubtful—they usually say it is the occluded gases, or some such thing. I do not know what "occ-
2753 cluded gases" means myself, but I do know that you can not take coal that has been stored a long time and make good coke from it. Besides that, there is the breakage and other things that makes it uneconomical and the quality irregular. (1038)

By Commissioner POTTER:

As to how the inferior quality of the coke manifests itself, there are many things. The structure is the chief thing. In a blast furnace one of the qualities of the coke is its ability to bear the weight of the burden of ore put upon it. In other words, you can have two cokes of exactly the same analyses, but have one which is of inferior structure, and it is inferior coke. I can not explain the scientific reason for that, but I am sure the scientific people will tell

you that that is a fact; that the structure of the coke is the important part of the coke, and the structure of the coke is affected by these things, not only by the storage of coal, but the difference in temperature of the ovens, and things of that sort. But you can not store coal for coke, practically and successfully, and do good work.

By Mr. CRAVATH:

In our practice today our coal cars carry our coal directly to the hoppers that connect with the by-product coke ovens. It is the old practice extended to a greater distance. Instead of the coal cars carrying the coal to the beehive ovens, a short distance, they carry it a longer distance to the by-product ovens. (1039) Before deciding on the policy of buying our own cars we consulted the railroad companies. They informed us that for the conditions required, for the serving of us in the manner necessary to give us quality and regularity of operations, it was necessary, they believed, for us to have our own cars, because I have very seriously objected to this large investment without return.

2754 Cross-examination by Mr. BROWN:

We must have the kind of coal we want when we want it. As to whether, regardless of how anybody else gets any coal, that is a need we have, naturally we look after our own affiairs first. I won't say all steel producers to-day are using the by-product ovens, but I should imagine on a rough guess that three-fourths of the people in the United States are, and I think that if they are not doing it now that they will have to do it (1040) as soon as they are able, to be successful in the business. It is of most importance for every manufacturing industry to have a supply of coal if it is going to operate. If they did not have a supply of coal necessary for them, they undoubtedly close down. It is a pretty serious proposition with any manufacturer, especially in steel. (1041) I think our private cars are constantly in operation in hauling coal to our by-product plants. I can not tell you how many coal mines we have. As to whether, no matter how the general transportation system is, I consider that we must have these cars shuttled back and forth from our ovens to our mine every day, my answer is, "Yes," in order to get a regular, uniform supply of coal of the quality required.

By Mr. LIVERIGHT:

I have one of my homes up near Loretta. We have been buying coal mines for some time and I knew in a general way (1042) and was consulted about the total expenditure, but I was not consulted either as to the quality or the location of the mine. Naturally I know about the properties and have visited them, some of them. As to whether they are in the vicinity of the Loretta Estate, they are within 40 or 50 miles.

2755 As to whether those mines have "gone bad" with respect to sulphur, unfortunately, I have heard some of them have, and that in order to overcome the sulphur content we have had to wash the coal. It is not necessarily true that we could do that with

her coals that we bought. As to why not, that is a scientific ques-
on that I would not be able to tell you about, because you can not
ke coal and wash it and necessarily make good coal out of it for
ke. As to whether we make good [coke] out of this coal, that I can
ot state with reference to this specific coal, but you can be sure of one
ing, that if washing that coal (1043) gave it an analysis and struc-
re for coke making in that specific instance, it would not naturally
llow that you could wash any coal and make it available for coke
aking. As to whether I do not mean to say that there are not a
reat many coals in the Cambria district that would lend themselves
o the washing of the sulphur so that they would be available for
oke making, I do not know. I can not answer that.

By Commissioner CAMPBELL:

As to whether I have analyzed, or had anyone analyze for me,
just what the effect of the commission's order, should it stand, would
have upon the movement of our private cars, I do not know about
it. Our people could answer that better than I. I am only urging
one point; whatever way it may be accomplished, it must be accom-
plished in some way, to make it successful, in my opinion. (1044)
As to whether the effect of the order would be that it would be neces-
sary for the owners to dispose of their private cars, I can not answer
that. It would seem to me, from a business point of view, that it
must be self-evident that large manufacturing concerns would not
make a tremendous investment in cars upon which they have
2756 no return, except economic return that may come in the manu-
facturing of pig iron, and the necessity for doing it. Our
cars were bought because of the necessity of conducting our opera-
tions. It was because, to run steel works or coke-oven plants, you
must have a regular supply of the same kind of coal, whatever it
may be. You can not change your ovens day by day, with different
coals or different mixtures with any degree of success.

By Commissioner POTTER:

We have selected certain mines from which we draw coal for our
plants. They take care of our steel plant normally operated. As
to whether we have purchased too many mines to serve that purpose,
we have not unless for reserve.
2757 (1046) If it be assumed that the private car was not used,
and we were drawing regularly what we needed because we
had 100 per cent car supply and thus drawing from our mines
6,000 tons per day of this selected coal, and a coal shortage develops,
and we are suddenly informed that the car supply is only 50 per
cent, so that we will be permitted to draw only 3,000 tons of coal
per day when we want 6,000 you could not turn anywhere and
get that other 3,000 tons of coal. You could buy coal probably, but
it would not be coal suitable for the purpose, or even have it trans-
ported. It could not be done. I would rather lose the cars between

one or two departments of our steel works than to lose the cars that would transport our coal to our ovens if I had to have such an interrupted operation. Under those circumstances we would be thrown on the spot market to buy our extra 3,000 tons of coal per day. As to the coal we would be apt to have available at a time of car shortage, I think it would be an impossible situation. (1047) I do not think any coals that would be suitable for coking purposes would be available. As to whether we could protect ourselves by seasonal contracts, under which we would not be under obligation to take coal when we did not want it, but could have it at a time of shortage, I think it would be a very foolish coal operator that would do that. As to whether if there were spot coal available, theoretically, during a time of shortage it would be feasible to cover the field with chemists and analysts so that we could run from mine to mine from day to day and analyze the coal that we could get and determine whether we could use it, it is not, for the reason that a chemical analysis does not always determine it. Before we decide upon the coals, we try them
2758 out; we use them; see how much they will expand in the ovens, because coal of the same analysis will expand differently in the ovens. As to whether I am able to say what would probably be the effect of this order not allowing us to use our private cars in time of a car shortage (1048), it would be disastrous to a degree. I can not tell you the economic disadvantage that it would be to the steel works and the national industries of this country. It would be the greatest economic step backward for steel manufacture that I could possibly imagine. The art of steel making has advanced very much during the last 20 years. It has made greater advancement in the direction of by-products, especially from coal, than any other advancement in metallurgy. In 20 years the art of steel making has changed as to refined qualities. The broad basic principles of steel making have not radically changed in 20 years, since the introduction of the open-hearth furnace. (1049) The whole tendency has been to higher qualities of alloyed steels. We look to a continuation of that in the future. Undoubtedly the effect of that tendency in steel making is to require more and more the selection of special coals for special uses. My recollection, without being accurate, is that in the examination of mines our people do not find more than five per cent of all the mines we examine available for high-class steel making.

By Mr. LIVERIGHT:

I do not know of any contract between our organization and the railroads with respect to these private cars. (1050) We do not have any desire for any preferential movement of our privately owned cars. Where there is a general slowing down of transportation we will take our chances with the others. We are obliged to take our medicine along with the general public.

2759 By Commissioner POTTER:

As to whether I mean that after it is determined what cars may be placed at our mines and may be used, we will take our chance in the movement of them, that is what I mean. I do not mean to say that in time of transportation embarrassment we would be willing to abandon the use of private cars. I mean we will take our chances with the railroad's ability to handle them.

By Mr. LIVERIGHT:

As to whether we will take our chances with respect to the movement toward the mines as well as the loaded cars from the mines (1051), with reference to the transportation question, that belongs to the railroad, and we will naturally take our chances. Whether we will share with the general public in transportation is a matter we would have no control over. As to whether we would be willing to do that, well, we could not help it.

By Mr. CURRY:

I have expressed the opinion that it is of the very highest importance that our industry be allowed to continue the use of private cars in order that we may get an adequate supply of coal at regular intervals, in order to operate our plants successfully. (1052) Our coke-oven plants were installed ten or twelve years ago at our Bethlehem plant. We acquired our private cars about five or six years ago. As to whether 1920 was the date, I do not remember. As to how we were able to get along from the time we installed the coke-oven plants until we bought private cars, I can not give you much information beyond saying that it has been a surprise to me and we often wonder how we got along (1053) without the open-hearth furnace before we introduced it. It was a step in economy and
2760 necessity, as most great inventions and developments are the result of necessity. I do remember distinctly that the purchase of these cars, whenever it was, three or four years ago, was urged upon me not as an economical thing, a return upon capital, but as a necessity for the operation of our works. How we got along before would be a long story. I could hardly tell you. I imagine that we had contracts with given mines; that we had arrangements for transporting a certain tonnage of this coal from those mines at a given time; that we perhaps carried a certain amount in storage. I do not know that, but that is probably the way it was managed.

By Mr. CRAVATH:

During the war we were helped by priority orders, so that during the war period we got protection that we could not get in times of peace. We got coal first in our industry because of our ordnance requirements.

By Mr. CURRY:

(1054) I think some of our mines were acquired before and some after we acquired our private cars. I do not know what part of the

requirements of our plants is furnished in private cars. The details of this matter are so general that I can not be accurate in my information. As to the facts upon which I base the conclusion that these cars are so necessary to the regular, orderly operation of our plants, I have been trying to think of some illustration, and I think of one. The gas from by-product ovens will run our open-hearth furnaces in the steel mill. Let us suppose we are delayed in coal to keep those ovens going regularly. There is no gas coming from those ovens, and the result is that not only are your coke ovens stopped but your open-hearth steel making and the things depending upon those gases that come from the coal stop. So that it is a much more serious thing than the mere delay to the coke busi-
2761 ness. I could tell you a great many reasons of that kind (1055) that make it economically absolutely necessary that the supply of coal to a great modern steel works be regular and of the quality required. (1056) As to what extent after these private cars were purchased, we purchased coal on a partial contract basis, I do not know. I do not know whether since we bought those cars the mines to which they were sent have been able to operate regularly at full time because of the purchase of those cars. I think it has been quite clearly demonstrated and understood through years of experience that the dependence (1057) upon system cars alone in times of stress and production is not a very reliable source for regularity. I know through years of experience that is a rather uncertain element. As to whether by buying these private cars we have been able to secure a more adequate supply of coal from our mines and have been able to run our mines more regularly than if they had to depend on the commercial supply, I say that a steel works and coke ovens, by reason of the regular supply of raw materials in which the car, in my opinion, is a necessity, are able to run economically better and more regularly. Some of our mines are located in Pennsylvania. Some are located in West Virginia. (1058) I know, generally, that there was a severe car shortage on the Pennsylvania Railroad and the Baltimore & Ohio during the time immediately following Federal control. Whether or not at that time our private cars were able to supply our mines with full supply, I do not know. I do not know the rate the railroad pays us for our private cars. I have always understood that the return which we had from the railroad just about balanced the upkeep on the cars, and that we get no return for the capital investment. (1059) As to whether I have ever had occasion to make a study of the distribution of cars under the assigned car rule, I have not. Nor have I as to the effect of locomotive shortage, for example, in enforcing that rule, or a shortage of track facilities or
2762 congestion at terminals. I have not studied those questions. I have decided by the general result.

Redirect examination by Mr. CRAVATH:

As to whether in reaching my decision to purchase cars I was guided by the reports of our operating officials as to their experience

in transporting coal from the mines to the works in system cars, I was, of course. I remember that their reports were that the movement of coal was very unsatisfactory and that I urged them to devise other ways and means, if at all possible, to avoid this large expenditure (1060) of money that gave no return, and that the unanimous report of all of our operating officials was that unless we had this regular supply of coal of the quality desired, our works could not be satisfactorily operated, either as to quality or quantity or economy. That I am very sure of. That regular supply could only be assured by the ownership of our own cars was their clear recommendation. This large expenditure would not have been made for any other reason. There was no possibility of capital return. It was made only for necessity, just as any other expenditure in our steel plant and I regard the cars between the mines and the works just as much an integral part of manufacturing steel as I would our rolling mill or blast furnace or open-hearth or any other part of our arrangement. Before adopting the policy of buying our own cars, we took the precaution of consulting the railways to find out if they could assure better service than we had been having. Not only I myself but Mr. Gross and others did that. (1061)

By Mr. LIVERIGHT:

2763 We would not be willing to dispose of these cars and rely upon system cars unless the railroads gave us some kind of a written guarantee or bond financially assuring us, if we lost money by reason of their inability to furnish us coal at a time we wanted it. (1062) We would want the bond properly secured because our loss would be tremendous.

JAMES R. CAMPBELL, called as a witness, and having been duly sworn, testified as follows:

Direct examination by Dr. MANCHESTER:

I live at Youngstown, Ohio, and am president of the Youngstown Sheet & Tube Company. (1063) I have been in the iron & steel business since January 16, 1890. I have been engaged in the capacity of superintendent of works, afterwards in executive positions, and finally president. I was district manager for the Republic Iron & Steel Company for three years, afterwards vice president and then president of the Youngstown Sheet & Tube Company, which has been in business since about 1900. The Youngstown Sheet & Tube Company is the owner of private cars. As to the circumstances leading up to the purchase of our cars, going back to the time of the war, when of course we had more trouble and when it was more necessary for us to keep our plant in continuous operation, we had very serious trouble in securing fuel to operate our plant, not only for by-product ovens, but for steam and gas coal as well, all of them being equally important. (1064) It was difficult to secure transportation and the only thing that helped us there perhaps was the priorities that we received during the war, that gave

fuel an advantage over some of the other things because of its importance. After the war, however, we did not have the same benefits that we did during the war and during the year 1920 especially, when there was a very heavy demand for all of
2764 our products, we were unable to secure fuel in an adequate supply and the qualities that were required, both for gas or steam—the steam was not so important—but especially for by-product ovens. We were very loath to purchase cars so what we did instead was to put men at every point on the line of the railroads, every junction point, in order to try to hurry the transportation and to keep in close touch with the operating departments of the railroads in order to get this coal through, because we needed it really before it was loaded. We were developing our own coal mines at that time. That was a war measure and we had quite a scrap here with the railroad authorities to get them to agree to cooperate with us in building a small 7 miles of railroad to connect up with our coal properties. That matter finally went up, I think, to the President of the United States and he gave Judge Lovett orders to see that that coal was connected up. (1065) But that did not answer the purpose because we did not get the coal, even though we owned the coal mines, and we found finally that the only solution would be to purchase our own cars, which we did at a very great cost. As I remember it, a 70-ton car cost us between $3,400 and $3,500 each, which was about 2½ times as much as they would cost under normal conditions. We did not just go out and purchase the cars. We found out first what the railroads paid and what the custom was with reference to handling these cars and, as I remember it, it cost us from two and a half to three cents a ton, that is, depreciation and the repairs on the cars, without counting any interest on the investment, more to operate these cars than it would to use the railroad-system cars in the work. But, of course, to ourselves and to
2765 the general public, a cost of two or three cents or five cents a ton did not cut any particular figure if we could keep our plant in more continuous, uninterrupted operation. (1066) The public, in the last analysis, pays all of these costs. Of course, they do not pay it entirely. The operating companies have to suffer with them, but anything that adds to the cost of production of any class of material must be paid for in the end by the public. All of our selling prices are based on our costs. Any interruption in our operation is charged up every month in our costs and the more continuous our operation is the lower our costs are. The larger the volume of production, the lower our costs. Those are reasons why we can make the public lower prices. In ordinary times it has a very great bearing on the selling prices of our products. I will not be bold enough to say that in good times like 1920 we did not make larger profits than we do under normal conditions because there were people offering us bonuses and all of that, in order to get deliveries and we, of course, naturally got larger prices; but under normal conditions which usually prevail or under abnormal conditions when business

is slack as it is at present, we are looking to reduce our costs in every way that we can and put in every economy possible and we give it away to the public, unfortunately. (1067) Since the purchase of our cars, I do not hear about the coal question any more. With our supply of cars and with our own mines supplying a large percentage of our own fuel, the fuel business rarely ever comes to me. For years prior to the time that we owned these cars it was a daily question with us how we were going to secure fuel to operate our plant. We would buy coal wherever we could get it and store it. We would put the poorest in one pile, the next poorest in another pile and the best in another pile and
2766 we would use from the good pile for the by-product ovens, and when it was not suitable oftentimes we would have to "slop over" into the poorest coal that we had, to keep our by-product ovens going. That was a great economic loss, because the difference in burden that one coal will carry over another, and the difference in sulphur and the difference in the amount of limestone that has to go in to carry off the ash, the sulphur, and so forth, make a great difference. (1068) We would rather have a medium good coal, if we could have it continuously, than we would to have a first-class coal to-day, a poor quality to-morrow, because it is constantly shifting the burden on the furnace. We have got to change the lime; we have got to change our burden, because when the coke will not stand the strain, will not carry the burden, we have got to change that and put in a larger percentage of coke or a larger percentage of lime, or a less percentage. It makes very irregular operation on your blast furnaces and adds to your cost and reduces your tons—interferes with the quality. As to the effect upon our business of an order of the commission, which, while not preventing the use of our private cars, would reduce their placement at the mines to the same distributive basis as would be accorded to railroad-owned cars in periods of car shortage, it would be very serious, it seems to me, and that would be an unusual thing for us to make investments in cars and then leave part of them standing on the side-tracks and not be able to use them. If we buy those cars, the railroads do not have to buy them. They replace that many cars to the railroads, and they have more money to buy locomotives (1069), which has been the cause of our troubles when we have been short of transportation more than the shortage of cars. They have not had the motive power to place the cars and move them promptly. In a great many cases, when there has
2767 been a big howl about shortage of cars, it has been shortage of power or shortage of terminal facilities, or one thing or another in the operation of the railroad. So that it would be a very serious matter to us, and it would just cut off that portion of our business, without any resulting benefit, in my opinion, to the other fellow. If you take the locomotives to move all of our cars in preference to the other fellow's cars, that would be a very

different question. Then we would be interfering with the smaller operator, and we would not ask that.

By Commissioner CAMPBELL:

As to whether after we obtained our private cars we got, in times of car shortage, more transportation than we otherwise would have if we had not owned the cars, I think we did. As to whether the result of the commission's order, if allowed to stand, would be to put us upon an equality with the man who does not own private cars, and thereby deprive us of some transportation that we otherwise would have, if allowed to keep our private cars, my answer is no. (1070–71) I do not think it would put us on an equality. I think it would be an injury to him as well as to us. He would not get any more cars, unless you gave him our cars, which we would not agree to, and you could not confiscate our property, certainly, under the Constitution, and take it and give it to the other fellow. It would not help him any if we let our cars stand on the sidetrack and we are only given half as many as we require. As to whether in the case of engine shortage the ownership of these private cars gave us transportation at a time of car shortage that we otherwise would not have obtained, I think that it does, and I think that it is an economy, as far as the railroads are concerned. They move our cars in trainloads, without any assembling cost or any switching to get them together at the terminal points. They take them out of our plants in trainloads and they take them
2768 direct to the mines in trainloads, without any switching en route. They take them from the mines in trainloads and take them direct into our plants without any switching. It requires less terminal facilities, and it is economical in every respect. (1072) I think the commission's order would deprive us of the use of special kinds of coal. If we can not get our own coal, we would be obliged to go into the market and buy any kind of coal that we could buy. Sometimes we would get good coal and sometimes we could not, and the shortage would have to be met with cats and dogs, just as it was during the war, from any of the mines. We bought large tonnages of coal, but we bought it pretty largely from three of the large producers of coal, like the Bird Coal Company, the Hillman Company, and others. We selected it by districts where we know that the mine produces a certain kind of coal. Of course, during the war we did not get the same care in mining and selection, and did not get as good coal, but ordinarily we do, out of that district, get certain coal that will answer the purpose.

By Mr. MANCHESTER:

As to whether it is to be understood that in my opinion the use of the private cars in periods of locomotive shortage would appropriate to our service an undue proportion of motive power or other railroad facilities, my answer is "no." I do not understand that we would get any advantage in motive power. (1073) We have no

ght to any advantage in the motive power, but they do handle our
al with less power in our own cars than they would if they had
assemble the cars of all different classes and kinds, in order to
ansport our coal.

Cross-examination by Mr. BROWN:

I would say that our coal mines are about 120 or 130 miles
from our plant at Youngstown. We have them in different
769 districts. We have two operating mines in the Connellsville
district and one in the central Ohio, two in West Virginia, and
ave interests in others in Virginia and Kentucky. We have plants
t Chicago, and Zanesville, Ohio, as well as Youngstown. Coal
noving to our Youngstown plant from Connellsville moves through
he Pittsburgh district. If there is congestion there at Pittsburgh,
we take our chance in getting our cars through that congestion the
ame as any other shipper. (1074) Our shipments from Connells-
ville to Youngstown are over two railroad divisions. As to having
to change engines at some point on the route, I am not close enough
of course to our operation, but it occurs to me now that they have put
an engine on at our mine and run the trains directly through to
our plant. Our plant is right at the terminal of the Pittsburgh
& Lake Erie and the Pennsylvania at Youngstown. We absolutely
must have the kind of coal that we want when we want it. And
if we do not, we lose money and the public loses money as well.
(1075) We are in business to make money the same as every other
business man. As to whether this method of getting the coal from
our own mines with our own cars enables us to make money, I would
not say that always enables us to make money. I think it is a help,
but we have not always been so very prosperous since we have had
our own cars; but it does enable us to operate with less intermittence
than heretofore and it is a very important adjunct of our business
in order to get coal of the different qualities that we need, not only
for by-product but for steam and for gas purposes to operate our
plant, and to get it continuously. We had to resort to storing coal,
before we had private cars, in large tonnages with very great deteri-
oration. The longer the time coal is stored the greater percentage
of deterioration and the less advantageous it is. We take the
2770 entire product of our own mines and sell no coal commercially.
We buy considerable in addition. (1076) I think we have
about 1,500 cars. I think, perhaps, we bought them in 1920. That
is when we had the greatest stress. The coal-car situation in 1920
was very acute. That was the moving cause for our purchase of those
cars. We purchased 500 of them from the Cambria Steel Company
at Johnstown. It was then the Midvale Steel Company. (1077) I
don't know about the others. We got some through the Steel &
Tube Company. 1920 was a bad time to buy cars. We paid a big
price for them and it was hard to get delivery. As to whether I
think that by reason of our ownership and our investment in private
cars, no matter what the condition of transportation, of car supply

for the public generally, we must have our cars moved regularly from our mines to our plants, I do, either our own cars or somebody else's. We would be very glad to dispose of these cars if we could be assured that we were going to get an adequate supply from the railroad companies themselves. We would want some substantial assurance more than just having somebody tell us.

By Mr. LIVERIGHT:

(1078) As to whether in these periods of transportation shortage it is natural for the railroad company to move coal so that it can get the most coal moved over the rails, I presume it is. If, incidentally, we happen to become the beneficiary under such practice, we are not complaining. We have tried to get that sometimes, perhaps, when we did not deserve it, when we were under stress of conditions. I think it is much more economical to move large trains of cars in trainload lots than to go from siding to siding, tipple to tipple, during periods of locomotive shortage and pick up cars and assemble them and then redistribute them to the consumer. In such periods we continue to get our coal in trainload lots as a result
2771 of the railroad practice. (1079) I think that is a good thing for the general public.

By Commissioner POTTER:

My idea is that when there is ample power to haul the coal produced, the use of our private cars does not decrease the system cars available to other shippers. I think it increases the number of cars available to other shippers, under our conditions, unless they would take the power to move our cars, which I do not think should be permitted.

2772 By Commissioner AITCHISON: (1080)

Strikes sometimes result in a shortage of motive power. "The same thing would affect in a shortage of cars as well." These are things that come along periodically and we have got to reckon with them when they come, but they do not have any bearing on the question as a whole. It is an interruption which you cannot account for under normal conditions.

"Q. (By Commissioner POTTER.) How much importance do you want us to attach to your statement that trouble generally arises from power shortage rather than car shortage?

A. Well, I am only stating my opinion. The railroad people——

Commissioner AITCHISON. (Interposing.) The commissioner has not finished his question. (1081)

Q. (By Commissioner POTTER.) I am trying to get the significance of that. In other words, do you think that statement is true on all railroads—all coal handling railroads?

A. No; I do not. (1082)

Q. (By Commissioner POTTER.) Or do you have in mind particular situations?

A. The New York Central have had plenty of power when other railroads, and other prominent railroads, have not had plenty of power. That may be reversed at times.

Q. How accurately and completely informed do you think you are with respect to power shortage throughout the country generally?

A. I do not think I am accurately informed at all. I was only expressing my opinion, and I get that not only from our own people who are close to the operation of railroads, but I get it from the railroad executives themselves, under different conditions, and I have found many times when the press and when the people were taking about shortage of cars, really it was a shortage of power, and I am only expressing my particular opinion. That is not
2773 continuous. It does not always happen. Oftentimes there is a shortage of cars and there may be plenty of power; but I am talking about times—and you cannot put too much weight on that, because I am not an expert; I do not know anything about operating a railroad. It is just my general opinion that I am testifying from."

By Commissioner POTTER:

As to whether if there is a shortage of power, it is my thought that the roads should have enough power to move all tonnage offered, (1083) whether it moves in private cars or system cars, my answer is yes, and that the thing to do is to increase the power or increase the terminal facilities or whatever the trouble is. If the commission has the power to do that, it seems to me it had better leave the car situation as it is and make the railroads furnish enough power to give us all the transportation that we need. That would be the economic thing for the country as a whole. If the commission has not the power to require the carriers to purchase additional power or increase the facilities, I think it has the power to prevent any discrimination in the use of existing facilities which the private car might bring about, and I think the commission ought to prevent any discrimination, but I think it is discriminating against (1084) the man who has the private cars, and against the railroad as well, who has not the money to furnish the cars, or for some reason do not do it, and the commission does not make them do it. The commission ought to have some reason if we are willing to put in our capital there, without any return, for an economic reason. It seems to me that we should not be interfered with by the Government, that we are all supporting here, and paying the freight on in the way of taxes. We should not be interfered with by Government agents and should be kept from an economic loss. As to whether it
2774 is my thought that if discrimination does exist during certain periods because of a shortage of cars, nevertheless the private car practice is so beneficial generally that any particular discrimination which exists is not unjust but is just discrimination, and should be permitted, my answer is no. I would not agree that there was a

discrimination. If there is, as far as the power is concerned, then that ought to be remedied by the commission. We have no right and do not ask for the movement of our cars when other people's cars cannot be moved.

By Commissioner AITCHISON:

We may ask the railroad personally to do it and urge them to do it just as we are looking after our own business. (1085) Anybody who is running his own business is going to do everything he can to assist it, but we have not any right to ask that our coal be moved in preference to other people's coal or in preference to any other class of freight, perhaps. As to whether I would want our private cars moved preferentially, if there is plenty of power on the line, but it is caught at one end of the line where, by an act of God, such as a sudden flood, or something of that sort, it cannot be moved to the part of the line I am interested in, I would not answer that question, as it seems to me a flood now and then is an abnormal thing. You cannot provide for a flood that is going to happen once in ten years, by doing some economically wrong thing. These things are always going to happen.

By Commissioner POTTER:

As to whether we would be satisfied to have the available cars prorated over the tonnage offered, we would absolutely. We have not any right to any preference.

By Commissioner AITCHISON: (1086)

We are not asking for the use of this power in preference to other people. If they are short of power, make them got more
2775 power if you have the authority, and if you have not it ought to be divided among the people along that line. I think that would apply also in the case of a congested terminal or inability of a connection to receive, which had the effect of diminishing the carrier's ability to move currently. I think if there were a certain line of railroad that was serving a certain district and any unforseen thing like a flood or congestion happened, everybody has got to take his medicine while that lasts, until it can be straightened out, and nobody should have preference over another except in war times or in times of movement of food and all those things. Food must be given preference over other things, and perhaps coal in cold weather should be given perference. (1087) They do need coal to keep them warm in the winter, and in those cases where there is a shortage of transportation fuel ought to be given preference for that purpose and industry should shut down if necessary, just as we have shut down our plant and given fuel to keep our people warm during the war. If a line of railroad is so constructed that by reason of its grades and curvatures, the lack of sufficient passing tracks, and the like it is only able to transport a given amount of tonnage a day, and a demand is made upon it currently and always exceeding that amount, so that it is unable to bring the cars in, place them, or take

them out in the amount demanded, I do not think the privately assigned car should take preference, although I am not familiar with that situation. All of our plants are located in districts where they have many lines of railroad and ample facilities, as far as trackage and terminals are concerned. In the Chicago and in the Youngstown district there are many lines of railroad. If one is congested, the other can move it.

By Mr. CURRY: (1088)

Our plants are located at Youngstown, Ohio, Zanesville, Ohio,
Chicago, Ill., Kalamazoo, Mich., Mayville, Wis., Evanston,
2776 and different places. I don't know where they are. Some of
them I have never seen. We use by-product coke ovens at those plants. We made our first contract for by-product ovens in 1915. I think they were put in operation late in 1916. My recollection is that our private cars were bought in 1920. I don't know whether our private cars are sent to all of our plants, but they are to Chicago, to Zanesville, and to the Youngstown plants. As to the mines from which we get the coal for our Youngstown plant, I know we get it from our own mines. We have five operating mines of our own, (1089) and we are interested in three others where we take a certain percentage of the coal, and then in addition to that we buy large quantities of coal from the Pittsburgh Coal Company, Hillman & Co., and B. Nichol & Co. I do not know what per cent of our coal requirements is secured in private cars, probably about 60 per cent. I don't know what per cent of our coal is secured from mines other than our own mines. We are increasing our coal production in our own mines every day, and for that reason it changes from time to time. As to whether we were able to get along without private cars up until 1920, we did get along just as other people got along. We got along some way or other; but it was a day and night matter with us, and consultations day after day, every week, and with some of our people every day, and with people all over the country, at terminal points of the railroad, trying to hurry the shipments through. That was not true all the time before we bought these private cars. That is only true in prosperous times when you need the full output of the mines and when everybody else needs it and when transportation is pushed to its limit. When there is plenty of transportation and plenty of coal and there is not any business, you can get all the stuff you want and more too. We have to provide for these peak periods. We bought these private cars in
order to keep our works in continuous operation instead of
2777 intermittent operation. I have not made any study to determine to what extent we have been better able to secure coal for our plants by the use of private cars than if we had to depend upon the commercial cars, because it has not been necessary. I do not hear about the coal situation now. (1091) It is not once a month that I am talked to about coal. I get a report every day showing how much coal there is on the track. I do not pay any

attention to it any more. I do not read it because we are getting all the coal we want. Since we have had the private cars our mines have been able to operate regularly and we have been able to secure full car supply. The cars have served the purpose for which they were bought and we have gotten a better quality of coal. We have got the quality we require. I would not say that is true every day, but I do not hear anything about the coal business any more. It seems to me one of the burdens of our life was to get coal. Now our people have some trouble; I suppose they have times when they do not get enough, but they get it some way or other. It does not come to me. (1092) Our own mines are located in Pennsylvania, Ohio, West Virginia, Virginia, and I guess some in Kentucky. I don't know. Our mines in Pennsylvania are located on the Monongahela, which is owned jointly by the New York Central, the Baltimore & Ohio, and the Pennsylvania. That is our largest mine, the Nemaco, and the Briar Hill mine is located on the same railroad, owned jointly by those three railways. I know our private cars are used on that railroad, but I don't know that they are all used there. Any coal that comes out of the Connellsville district must come over that railroad, mostly. I don't know on what railroad our mines are located in West Virginia. I think it is the C. & O. (1093) We did not own these mines in West Virginia until last year, and got possession of them the first of July. As to where we bought our coal last year, we buy it wherever we can buy it to the best advan-
2778 tage, quality and price considered. We buy most of our coal, as I said, two or three times a year from Hillman & Company, the Pittsburgh Coal Company, and B. Nichol & Co. We buy coal sometimes from other people, but the bulk of coal that we buy I kno wcomes from these people. I do not know whether or not, following the shopmen's strike in 1922, our cars were used on the C. & O. R. R. We did not have anything to do with that. (1094) We get large quantities of coal, about 30,000 tons a month, of low volatile coal all the time at Youngstown. We did not have any contract on the C. & O. that I know of at that time. I think they were on the Norfolk & Western for our Youngstown plant before we acquired the Chicago properties. We did not own the mines. We bought the coal. We agreed to take a certain tonnage from the mines per month. We never used our private cars for that service. We always depended on the railroad companies to furnish the cars for our low volatile coal. (1095) We were able to secure our coal on the Norfolk & Western without private cars, "after a way." Sometimes we would have to use 10 per cent instead of using 20 per cent, as we wanted to, but we got more or less coal all the time to keep us going, and we varied the amount according to what we could get. We would not necessarily shut down our plants on that account. Sometimes we would make a poorer quality of coke, but in order to get the volatility right in our mixture we figure on using about 20 per cent low volatile coal, and if we can not get 20 we run

down to 15, and if we can not get any better we will only use 10 in order to get through, but it is an economic loss, of course, to do it. I could not say that at that time we got all of our low volatile coal from the Norfolk & Western mines. There may have been some of it come over the Chesapeake & Ohio or some other road down there. We got it in that territory, pretty largely. We got some Somerset low volatile coal when we could not get it from Virginia and West Virginia. (1096) I know that our experience for 20 years
2779 prior to the time that we got our own private cars was very unsatisfactory in peak times. Of course, many times when business was depressed more or less transportation was good, and they had plenty of power and plenty of cars and we did not suffer, but we have to provide ourselves against peak times. That is when our most prosperous time is, and when people want our material most, and if we can not furnish them they are not going to buy from us when they can get it from Tom, Dick, and Harry, and we have to provide ourselves for the prosperous periods, and that is the reason we want to run our plant continuously. As to whether in the Pennsylvania district our mines were able to operate fully, by virtue of these private cars, while other mines were not operating fully since we bought the cars, I could not say what the reason was. (1097) I know that we have operated full most of the time and that we operated full sometimes before, but we piled the coal on the ground, and when we could get cars we reloaded it again, which was an economical loss. By virtue of the purchase of these private cars and of the assigned-car rule we were able to secure a greater supply of coal from our mines and a higher percentage of distribution than if we had to rely on the commercial car supply. Our supply of coal is very much more satisfactory.

By Mr. HIGGINS:

I testified that prior to the purchase of private cars we instructed additional field forces to be placed at many of the terminals in the hope that possibly we might be able to get our coal through more promptly. I suppose the field forces were placed at the congested terminals. I do not know about the details. We were not advised prior to instructing those field forces that we were receiving less than our pro rata share of the available transportation of the carriers during that congested period. We never paid any attention
2780 to that. We were looking after our own business entirely and tried to get all the coal we could for ourselves. As to the purchase of our cars, all of our people felt that the only way we could operate our plant continuously was to buy these cars. We put it off just as long as we felt we could afford to put it off. The railroads were not furnishing the power or the cars, whichever it was, themselves, and we felt that we would have to help, and for that reason it led us, after a very careful investigation (1099) and knowing it was going to cost us from 2½ to 3 cents a ton on the fuel move, to own these cars. Our operating officials said they thought

we would be able to get fuel to operate our plants if private cars were placed in service. That is the ultimate purpose that we are after, to operate our property to its full capacity when there is business offered to operate. I don't believe that other shippers, not having private cars, were being inconvenienced by the service that was being given to our cars. (1100) I think it was a help to the whole country, where the railroads refused or were unable to buy cars themselves for these people who could buy them and put them in service to do so. I don't think that if the equipment of the carrier, the motive power, and the terminal facilities were devoted to more intensive use of private cars it would restrict materially the movement of system cars to the extent that private cars received service. Our private cars do not require any terminals really. They move in train loads and go right through the terminals without blocking up the terminals, if they have the power to carry on; and they come right into our plant, so that I think that it hardly follows that it interferes with the terminals for other people. (1101) On the other hand, if they had to assemble cars of all different kinds and classes which would require a lot of switching, which is not necessary when they take a train load right into the plant, it would cause a great deal more congestion. What you are trying to get at is
2781 that we are using the power more particularly for transporting our coal and taking it away from the other people. That may be. I don't know. I am not a railroad man. I do not know what the statistics are. I know that we are getting a better supply of coal, and if we are using more of the power than the general public is then you ought to restrict the power. But why take the car away from us when it is helping everybody? We haven't the right to absorb all the use of the power of the railroads to move our coal, and I am not asking for that. As to whether my position is one of giving us our pro rata share of the available transportation when motive-power facilities, track facilities, or terminal facilities are such that the shippers can not receive a 100 per cent service, I would hardly say that. "If we could get our pro rata share, perhaps, of all the transportation under the ruling of this board, (1102) which is perhaps perfectly just—but we did not get 100 per cent of fuel under that ruling because the railroads refused to buy the cars, or did not have the money to buy the cars, and could not furnish them, and the only way we could help our supply over and above that situation was to put money into this car supply," that would help out. But we did not get all of the benefit from that, because we left the other cars for the general public; we used our own. We do not use our private cars for the movement of our finished product from our plants. We depend on the railroads for that. They would be scattered all over the United States, and that would not be practicable. (1103) We could not afford to purchase private cars to enable us to transport our product away from our plant. Sending out 30,400 cars of finished material a day and scattering the cars all through the United States, we would have to buy cars so rapidly, because they would be taken

for other purposes. It is only the interchange between the different railroad systems that justifies them in any way or that gives them a return, that they can afford to do that, which the private man could
2782 not. The private cars have got to run continuously between practically two points, just as Mr. Schwab explained. We have moved our coke plant from the mine up to the plant now, and we have to transport that coal backwards and forwards, and under any other condition I doubt whether the private car would be feasible at all. (1104) As to whether the quality of our steel was seriously impaired prior to the purchase of private cars, it certainly was. During the war, when we could not get the kind of fuel that was required, there were thousands of tons of steel we had to throw aside because we could not use it. We would get all kinds of steel. We have to analyze every heat of steel that we make as we make it. We do that all the time and in that way we detect steel that we could not use for a certain purpose and may be put it into some other purpose. We do that yet, of course, but we had very large objections even by our own people because we did not dare ship it out. That was all due to the fact that that went into the by-product coke ovens. As to rejections, I do not think our business is quite as technical as the tool-steel maker or, perhaps, the Bethlehem Steel, part of their work, where they are making alloy steels. We make very few alloy steels. It is a common, ordinary steel (1105) but it must be of a certain high quality and must be uniform. If you put a string of pipe into a well 6,000 feet deep, as they are drilling them now in California, and you hang a whole string on one thread, it has got to be pretty good quality, and you have to know it, or you are liable to cost your customer or yourself a large amount of money. We want our just pro rata of power, that is, on the railroad: more than that I do not think we are entitled to. As to whether I have any specific instances of a shortage of power on the Pennsylvania Railroad that prevented us from receiving our private cars currently, I have not any specific information about railroading. I am not a railroad expert. I only know about it in a general way.
2783 (1106) I said I thought oftentimes when they talked about shortage of cars it was shortage of power, and I got that opinion not only from talking with our own people, who are familiar with our transportation problems, but with railroad executives with whom I talk here and there. As to the effect of the order of the commission now being investigated, all of our operating people are very much concerned about it and I am very much concerned about it. I think it is a very serious matter not only for us but the country as a whole, because I doubt whether this commission is going to force railroads to replace the car supply that they are getting now from the private-car owners. (1107) I understand that the transportation act provides for a reasonable and adequate transportation service for us as a shipper, but you do not guarantee it and you do not furnish it under all conditions, so that whatever your policy

is or whatever you may want to do you can not carry it out. Experience teaches us that. I hope you are not going to interfere with a condition that we are trying to help ourselves here, and trying to do it without interfering with our neighbors or other people who are entitled to transportation, by taking away from us the benefits that we may get from this private car operation. (1108) I don't think that other people are going to be induced to buy cars. People are not going to put their capital into this unless they are driven to do it, and it is only in certain instances, like where you have a coal mine here, and a works there, that you can shuttle those cars backwards and forwards promptly and use them to advantage at all. People do it for intermillwork and all those things in order to have the conveniences that go with it. I am president of a company operating coal mines. If my mine received 100 per cent car supply and the operator of an adjacent coal mine only received currently a 50 per cent car supply (1109) he could not purchase private cars in order to run the same amount of time and provide the same working conditions for his men that we are providing. The con-
2784 ditions are not similar. He is selling his coal to different people all over the country and he could not supply cars enough to have a continuous supply of his own cars to transport it, because he would be selling coal to one man in Keokuk, another in Chicago, and another in Cincinnati, and would not get the cars.

By Commissioner AITCHISON:

If he shipped all of his coal to the Lakes, then, of course, it would be a parallel condition. I do not know how you are going to help that fellow by taking our cars away from us.

By Mr. HIGGINS:

With respect to taking, as an example, an adjacent mine shipping to a public utility to one point consuming the entire output, there is not any one public utility, or very few of them at least in this country, that take the output of a coal mine. (1110) I understand there are a number of public utilities that have no private cars and have nothing but railroad service to depend upon, but they draw their supply oftentimes from a number of different mines.

2785 By Mr. MANCHESTER (1111):

As to whether I have made any study or pretend to know what the motive power situation on the railroads actually is or has been, my answer is "No, never." The statement I made about motive power just comes from the information I get from our own traffic people and from the railroad executives with whom I have talked at different times.

By Commissioner POTTER (1113):

We manufacture a variety of steel products. We are large manufacturers, of course, of pig iron. We make large quantities of by-product coke, which we use in our blast furnaces. We make steel ingots, steel sheets, bars, and steel billets. We make pipe, wire, and

eets, plates, and bars, and nearly all of the lighter forms. We
o not make any structural steel or rails. But we make everything
utside of that. I would not say that we produce what might be
rmed a general character of steel rather than special products.
hey are special products, but they are not special in quality like
loy steel. They are made fairly largely from the same kind of
eel, what we call soft steel. It is not likely that we can get
ong with the inconvenience of irregularity in the quality of coal
at many other industries, other steel plants, could not get along
ith. (1114) It is just as bad for us, because you have the uneven
orking in your blast furnace, where you are making your pig
on, and it costs you more to make poor pig iron than it does to
ake good pig iron. It is just as important that we have a regular
pply of coal as for the Bethlehem. Their more important process
omes later on. They, of course, have to have basic materials which
ave to be right to start with, but we are just as afraid of sulphur
as Charlie Schwab is, and we are just as afraid of phos-
786 phorous and some of the other injurious elements. All of us
who are producers would be in about the same class. By-
roduct coke is the same to all. We can not make good coke unless
e have good fuel to make it out of. I endorse everything that
Ir. Schwab said except what he said about the cost of operating his
rs. He said they about broke even, I think. We find that with us
is a loss to operate. But we are willing to suffer that loss in
rder to get more continuous supply of fuel of the kind that we re-
uire in our business. (1115) I think we are buying in the
eighborhood of 40 per cent of our coal from outside mines. We
uy the best coal we can get at the lowest price we can get on it.
Ve select the coal from particular mines. There are a lot of mines
e would not pay half price for the coal. We could not use it in our
usiness. We have to have certain grades. We want as low ash
nd as low sulphur as possible, and we have to take the volatility into
onsideration for coke as well. As to whether we satisfy our-
elves that the mine from which it comes is a proper mine and do
ot merely go out and buy spot coal, my answer is "No." During
he war we were obliged to analyze every car of coal that we bought
nd distribute it, one for steam, one for gas, and another for coke.
Ve, of course, saved the best we could get for coke, and we know
rom all the different mines we are receiving coal from what mines
ill furnish us the coal that is best suited for us. A lot of mines
hen would mine rock and everything else because the miner would
et paid for it and would not be discharged, but under present con-
ditions (1116) the coal is very much improved.

787 ROBERT HOBSON, called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. PUTNAM (1117):

I am president of the Steel Company of Canada, Ltd., and have
ccupied the position of general manager and president for about

27 years under different names. We have by-product ovens, blast furnaces, open hearth, rolling mills, and various finishing plants. We employ from six to seven thousand men. (1118) We have had our by-product coke ovens since, I think, 1918 or 1919. We absolutely require for the operation of our by-product coke ovens and our plant the same regular, uniform quality of coal which Mr. Schwab and Mr. Campbell have testified that they need for their steel plants. I think our situation is more acute in that respect than theirs by reason of the fact that we have to haul our coal much greater distances and that we want a regular supply all the time. We use the gas from our coke ovens in our open-hearth furnaces. They are run entirely on tar and producer gas, so that in case our supply is cut off our supply of gas is cut down for these open-hearth operations. As to what we have done in the last four or five years to secure for ourselves this regular supply of coal of a uniform quality (1119) we found that the coal that we were getting was so irregular in quality, buying it from different operations, and the car supply was so irregular, that we first started out to secure a coal-mining proposition. We got that, and then built our coke ovens, and we found then that it was absolutely necessary for us, in order to get a regular supply, to have our own cars. The coal property we developed was the Mather mine in Greene County, Pa. That first began
2788 shipment in 1919. As to our experience in 1919 and 1920, we could not get anything like our supply, and we had to go out and buy coal from other operators. They also had the same difficulty in getting cars that we had at that Mather mine. About 85 per cent or 75 per cent of our coal we should get from the Mather mine. We have to buy 20 per cent of our low volatile coal to mix with that, and we find that we have very considerable difficulty in getting cars for that low volatile coal. We have no cars of our own running to those mines. (1120) As to the ill effects in our operations in the year 1920, they were very serious indeed. We were obliged to bank for a time one of our blast furnaces, and then eventually blow it out. As that furnace was on merchant pig iron, we were put out of that market until we could get a proper supply of coal again. It also cut down our gas supply for our steel plant very materially. In 1920 at the Mather mine, of which we are a part owner, we bought 400 cars. Since then the operation of those cars has very materially improved our coal supply. (1121) We carry a certain amount of coal in stock, but, as Mr. Schwab and Mr. Campbell have explained, coal held in stock deteriorates in value very rapidly. As to whether it is possible to take care of that situation by storing coal we would not attempt it. It deteriorates as much as 40 per cent after a certain time, and you will immediately notice it in the working of your blast furnaces. You get off-grades of iron, and it causes endless trouble. I know of no better solution of our problem than the ownership of these cars. If the use of these cars in times of car shortage is taken away from us, there is the alternative of having

number of spare mines, which is a possible way of getting over it, but from a financial point I do not see how we could possibly
2789 reach it, because we have not the money to invest in a number of spare mines. (1122)

By Commissioner POTTER:

If we put in a number of spare mines and everybody else does, and we ultimately have twice as many mines developed as we have to-day, I think the problem would be worse. I think a miner would probably get one or two days' work a week, and he would be the man to kick up the trouble then, I think.

By Mr. PUTNAM:

As to whether the difficulty to-day is that the country as a whole has these spare mines that go in operation in time of shortage, and we do not, I think there is a good deal in it. If a man could ship all his coal to one customer and have the mines distribute it over to people of that kind, you would get over your car shortage pretty quickly.

Cross-examination by Mr. BROWN:

The annual consumption of our company is about 450,000 tons. About 75 to 80 per cent of that is hauled in our private cars. I want to correct myself there. (1123) One of our plants is at Montreal, and we get some coal up from Nova Scotia which is delivered to us by boat. We get high volatile coal from the Mather mine, which is in Greene County, Pa., and we get our low volatile coal also from the United States. All the coal that we use for coking purposes is purchased in the United States. Our share of those 400 cars is sufficient to keep us going for high volatile coal. By our share I mean there are three of us interested in the Mather mine and the 400 cars are used in connection with supplying coal to those three parties, the 400 cars being the total number of cars connected with that mine. Those cars can shuttle back and forth from our property in Canada and supply us with our coal.

2790 By Commissioner AITCHISON (1124):

Our partners, who are also supplied with coal by the use of these private cars, are the Picands-Mather Company at Cleveland, Ohio, having, I think, blast furnaces at Toledo, Canton, and Erie, and the Cleveland Cliffs, which has blast furnaces at Cleveland.

By Mr. BROWN:

These 400 cars supply our partners at Cleveland and Toledo and us in Canada from the product of the Mather mine. So many cars go to Cleveland, so many to Toledo, and so many to Canada. (1125) They do that at the mine. They try to give us a run of coal for one day. Then they try to give the Cleveland Cliffs a run another day, and Picands-Mather another day, so that the cars go out pretty nearly in solid trains and minimize the amount of shunting at the various junctions. Our plant is located in Hamilton, Ontario, Canada. The coal is hauled all-rail excepting the cars are put on a ferry

at Ashtabula and brought across Lake Erie to a place called Port Maitland. Our object in buying these private cars in 1920 was that we should get to our plants the coal that we wanted when we wanted it. (1126) We make money by the continuity of our service. As to whether we have a contract or arrangement with the carriers that we get these cars regularly as we want them without regard to the supply of cars or motive power, or other obstruction in this country, my answer is "no." We have no contract with the carriers. We just hand those cars over as so much freight at the mine. We get our coal regularly. They come in in fairly long strings, and as soon as they are loaded they go out in a string, so they go right back without a large amount of shunting to be done. When we bought those cars, we looked into the matter as to how they were to be operated. I talked with the different railroad men. The
2791 Picands-Mather Company and the Cleveland Cliffs, who were in Cleveland, (1127) had much greater access to the railway men than we had, and they got up the information for us as far as possible. I don't know the railroad—New York Central or Pennsylvania. The mine is on the Pennsylvania I understand. I don't think the railroads told us they would give us the service if we bought the cars. I am not aware that they did.

By Mr. PUTNAM:

That was all handled through the Picands-Mather Company.

By Mr. BROWN:

I did not investigate the decisions of the Interstate Commerce Commission with respect to the use of private cars.

By Mr. LIVERIGHT (1128):

The distance from our coal mine in Pennsylvania to the point of consumption of the coal is about 400 miles. Under favorable conditions the trip from the mine to the plant is made in four or five days. That is particularly when we have the use of the ferry between Ashtabula and Port Maitland. When it has to go through Buffalo, it takes a longer time. From Port Maitland to the plant, I should say, is probably 35 miles. It would look like our cars traveled practically at the rate of 100 miles a day under load. Four days is exceptionally good operation. I have not got the figures as to how fast the empties get back to the mine from the plant. I think we get about two round trips per month out of each car, but I would not be sure about that. (1129) My recollection is that when we purchased the cars we figured on making about two round trips a month. I do not know whether we have bettered that expectancy. As to the difficulty prior to 1920 about the service, the miners from whom we were buying the coal could
2792 not get a car supply. Our mine is served by the Chartier Southern Railway Company. (1130) I think the major line with which it connects is the Pennsylvania. That mine started to operate in 1919. We had only about one year's experience before

re bought these private cars. As to whether the Chartier Southern ras supplied with motive power and other equipment, I understand hey have sufficient motive power inside of their own premises. As o whether it was lack of cars which prevented us from getting coal n 1919 and 1920, that was the best information I had. It was lack of cars. As to whether or not there was a congestion of erminals, lack of sidings, or lack of motive power, I have heard ll those things mentioned, but I can not give you any facts myself. (1131) I have not looked into that question. I have constantly heard that there was a shortage of terminals, a shortage of motive power, and that sort of thing, but I can not answer you of my own knowledge. My information about the situation on the Chartier Southern is absolutely limited. I don't know anything about it. I never was there. (1132)

By Mr. PUTNAM:

There is a source of supply of coal of the proper quality in Nova Scotia, but the distance makes it absolutely impossible for us to have it delivered. It is about 1,200 or 1,500 miles we would have to haul that coal.

By Commissioner AITCHISON:

We made an effort to get the Canadian railroads to furnish these cars. They turned me right down.

By Mr. CURRY:

With respect to the 450,000 tons of coal I spoke of, the larger part of our coal is used at Hamilton, Ont., and we have a large plant at Montreal (1133), but we get a considerable part of the coal for the Montreal plant from Nova Scotia, so that we prob-
2793 ably got about 400,000 tons from the United States. 75 to 80 per cent of the coal is transported in these private cars. As to the remaining 20 per cent we get our low volatile coal from what we call system cars. I don't know where we get that. "It is down in the States some place—the Consolidation Coal Company." (1134) We buy that coal from one of these coal-operating companies in the States. I think we are dealing with the Consolidation now. As to the 20 per cent we get satisfactory coal, but the deliveries are not always satisfactory by reason of the car shortage. The result of our investment in private cars was that we got a very much more regular supply of coal, and we got more regular coal because it was all from the one mine and not made up of coal bought here, there, and everywhere. Our study showed that by buying these private cars (1135) we were able to get a larger supply at our mine than if we had not had them. That was after we bought them in 1920. (1139)

[A paper relating to the testimony of Mr. Conners, of the Hocking Valley, was offered by Mr. Fletcher and was received in evidence as Exhibit No. R–25.] (1140)

HARRY COULBY, called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. PUTNAM: (1141)

I am a member of the firm of Picands-Mather Company, Cleveland, Ohio. We practically own and run the Toledo Furnace Company. That company makes merchant pig iron and has two furnaces at Toledo and a by-product coke oven. It also supplies gas to the city of Toledo. The Toledo Furnace Company is a manufacturer of merchant pig iron, and one of the most vital, if not the
2794 most vital, thing in the manufacture of that iron is a uniform, regular quality of coke. That is something that we were never able to get until, I think it was 1914, when we built a by-product coke furnace. Even at that time we had difficulty all the time in the irregularity of the quality of our coke supply, so much so that during periods of (1142) depression it was pretty hard for the furnace company to go ahead successfully and compete because of the irregularity of the quality of its iron. By "periods of depression" I mean periods of depression in business when competition gets very keen. I think it was in 1919 or 1920 that the question came up with us as to doing something to insure a regular quality of coke. I think it is almost more essential to a merchant blast furnace than it is to a steel works, because merchant pig iron is sold to a very large number of customers, so that it is of great importance that you should be able to regulate the quality of your pig iron and sell the fellow what he buys. It is no good going to him with an alibi that you had bad coke, or that your furnace was off, or something of that kind. He is not looking for that. He is looking for the results and looking to get what he bought. He can not go and put it in his open hearth and work out the sulphur and work out the bad qualities of the iron. That is the great question with the iron and steel industry, namely, what comes out of the blast furnace. (1143) If you get your trouble in the blast furnace it follows you along the way, down the line. We had the Mather collieries over in Pennsylvania that we were developing for the purpose of giving us a part of our mixture of coal for the by-product ovens. This question of the irregularity with which we got delivery of that coal came up again, so we went around to our railroad friends and put the situation up to them and asked them what was the solution. It does not make such an awful lot
2795 of difference about the quality of your coal, I mean in degree, so long as you get it regularly and uniformly, because your furnace men can make up their formula of what they will put in there and make the coke, but it must be regular. It must be uniform day by day in quality. The railroad men said to us, "There is only one thing that we recommend; you have got to have your own cars." That did not particularly appeal to us, to go and put out a million or a million and a half dollars into rail transportation. We are not in the railroad transportation business, but the vital thing

that concerned us was that that was an instrumentality that would insure us getting a regular, uniform product from that mine, (1144) so that when it got down to our by-product coke oven our people would know exactly what they had to figure on and could build up their formula on coal for making their coke regularly day by day, so that at the suggestion of our railroad friends, to overcome the very vital thing in the manufacture of pig iron, we agreed to come in and buy 400 cars for the Mather collieries. We paid a good price for them, but we did not look at it from an investment standpoint in the transportation link, in the car link. We only looked at what it was going to enable us to accomplish. It has worked out very satisfactorily. It has enabled us to regulate and to insure a uniform quality of product, and that is very vital to any blast-furnace concern that has to go out to all the buyers of merchant pig iron and sell their products. I think that there has been no known method worked out as yet whereby we can be assured that uniform product, except by the consumer owning and controlling his own railroad equipment, so that he can shuttle regularly back and forth, and keep him supplied with a regular quantity of that coal. I do not think I can stress too much the very vital need of the in-
2796 dustry to have that regularity of supply. I do not know of any way we can get it (1145) except in the way we are getting it now. In my own personal judgment, if the commission should change that, it would be making what I think the industry as a whole would regard as a step backward, because the quality of product is what we are all looking for and striving for all the time. The Picands-Mather Company and the Steel Company of Canada and the Cleveland-Cliffs Iron Company each owns one-third of the 400 private cars and each owns one-third of the Mather collieries. The Picands-Mather Company take their one-third of their product over to their furnace at Toledo, where it goes into their by-product plant. The Cleveland-Cliffs Company take their one-third of the product and send it to their merchant industry at Cleveland, and the Steel Company of Canada take their one-third of the product over to their steel works in Hamilton. We, however, are the operating managers of the mine and run the property for the joint account of the three interests. (1146)

By Commissioner AITCHISON:

None of these concerns sells coal commercially. They have not done it as yet. If there should be any depression in the business whereby they shut down some of their blast furnaces, they might have some coal for sale temporarily. I do not know. They have not had to meet that condition, but the property is a consuming property run exclusively for the benefit of these three consuming companies. Our concern is engaged in the sale of coal, but that is a separate branch of our business. I don't think any of the coal that comes in in these cars either goes into the market directly or takes the place of coal that otherwise would be used for our furnaces.

Cross-examination by Mr. BROWN: (1147)

I presume our plant in Cleveland consumes probably about
2796a 1,000 tons of coal a day. These 133 cars that each one of us gets does not supply our needs. We have to use a large number of system cars. We buy coal somewhere else besides these collieries. We get some of that from the West Virginia fields. It comes in over lines coming up from the south into Toledo, and comes over the Chesapeake & Ohio and the Norfolk & Western from that field. None of our private cars go into that field. As to whether we get that coal satisfactorily and in sufficient quantities (1148), at times it would be very much better if we had our own private cars in that business. We ought to have private cars for 100 per cent of our coal consumption in our by-product plants to insure us regular quality of coal. I am not speaking for any plant but our own.

By Mr. LIVERIGHT: (1149)

About 1914 we began to have trouble with the quality of coal being furnished us, and that continued up until the time we purchased the Greene County coal, until we got our own private cars in 1920. As to whether the main difficulty in competing was on account of the quality of the coal that we purchased and not on account of the car supply, "you know there was a war from 1914 to 1918." A consumer of pig iron was not very particular about the quality that he got. From 1914 to 1918 we could send out anything we could make, anything that was usable.

2797 (1150) There was complaint all the time between 1914 and 1918 about the pig iron that we produced, even during the war. It was a complaint about the quality of the pig iron that first led us to inquire into the source of coal supply. That was prior to 1914. The complaints were not so acute from 1914 to 1918 as they were in normal times, but they continued to some extent. We acquired this Greene County property before 1919, possibly during the early days of the war. We shipped from it when we could get system cars. As to whether we tried to get system cars to ship coal on the Chartier Southern Railway (1151), my answer is, "Yes: the Pennsylvania." I don't recall that in 1914 there was not any marked car shortage. I never have known of any great car surplus until this year. I recall that following the war there was a great slump and a considerable car surplus. There was a little panic season in there where there was a car surplus. What moved us in 1920 to try to buy private cars was the question of the uniform quality of our product. People were still kicking about it. They were not only kicking, but it was costing us a great deal more money to make pig iron than when we got our own regular supply. As to whether it was not really car supply at all but a uniformity of coal supply, that is all—transportation. The only way we could get uniform quality of the coal was by buying the private cars. (1152) It is just black, ordinary coking coal. I do not know anything about these coals. I think it is high volatile coal. I don't know how high or anything about its chemical analysis

coking qualities. With the formula we have it makes a good lity of coke. My knowledge of our coal field is very limited. I er was down there. (1153) I don't know how many months ce 1920 when we bought these cars it has been necessary to use m by reason of lack of system cars. I do not know whether they have been of service to us as much as 10 per cent of the time. 08 I know this rehearing is about the question of taking the private cars away from the owner. That is my understanding the ruling of the commission, and I object to that. I do not regard as confiscation. (1154) I regard it as a distinct step backward the part of the commission. What I want to do is to be insured at we can make a regular uniform quality of pig iron. I want e commission not to do anything that is going to disturb that rela- on that we already have with reference to these private cars.

Redirect examination (1155) by Mr. PUTNAM:

Our cars were purchased in August, 1920, and were delivered in he late fall of that year or I think in the early spring.

By Mr. BOYD:

I do not know what is the turn-around on these private cars from hese mines to our plant at Toledo.

By Mr. CURRY (1156):

We have a plant at Erie, Pa. We are not very proud of that, though. The Perry Iron Company operates that plant. We own the Perry Iron Company. (1157) That company does not use assigned cars or private cars. They have got to buy bee-hive coke from where they can get it. I do not know what per cent of the total coal requirement of our plants at Cleveland and Toledo is carried in our private cars.

JOHN M. GROSS, recalled as a witness, testified further as fol- lows:

Cross-examination (resumed) by Mr. LIVERIGHT (1158):

2799 Exhibit 23 shows only the transportation of materials from point of origin to the various plants of the Bethlehem Steel Company and relates not only to stone and other materials, but to coal. These movements of cars about which I spoke are largely movements of bituminous coal from mines owned or operated by us to our plants. They are not in every case, however, I referred to some from Davis, West Virginia. I don't know whether 85 per ent of the coal shown in here moves from our own mines to our own plant and can not indicate what proportion there might be. (1159) Exhibit No. 23 covers three different years, 1920 to 1923. The explanatory statement in the exhibit relates to 2,763 system cars and 1,947 private cars, a total of 4,711. (1160) Exhibit R-22 represents a normal year of coke material required. (1163) This s an exhibit of the bituminous coal requirements of all subsidiaries

of the corporation with a grand total of 11,976,000, the total for the 12 months. (1164) The 8,712,000 represents, I presume, the total coking coal actually required in the full operation. (1165) I do not know how many of the 4,711 cars shown on Exhibit 23 are used outside of hauling bituminous coal. (1166) I do not intend to convey the impression generally that system cars hauling bituminous coal throughout this country travel 60.2 miles per day. I don't know anything about system coal throughout the country generally. I merely limit the exhibit to what it shows with respect to the Bethlehem Steel operations (1167), and it is intended for no other purpose. I can not tell you the periods for which settlements are made with the railroads for the private cars. It is on the basis of the tariff rate of one and one-half cents per mile. We would have a record of the mileage and the railroad would have a record of the mileage, otherwise they could not pay us. I have no doubt both of us would have a record of the number of cars shipped from
2800 these respective mines. As to why we didn't make up a statement showing the actual private car performance from those sources (1168), I don't know to explain that. It is a tremendous labor to make up that book. I don't know whether the other labor would be decidedly less. We are trying here to show the specific movements and performance of our privately owned cars in the coal trade. It is particularly our aim to show that by particular instances only, covering the period of four years. As to a record of the actual performance of our private cars, showing the mileage per day, I presume the railroads that handle them can give that. I don't know whether we can or not. (1170) I thing we began to get the first private cars in August, 1920. (1171) My observation is that practically no commercial coal is moved in these cars. (1172) These cars operate between our mines and the plants and are set in on the assigned car basis.

By Commissioner AITCHISON (1173):

They were being operated on that basis in 1921. As I recall, I think everybody had all the cars they wanted in 1921, but we did not have as many cars in 1921 as we have now. We had only a thousand cars. I do not think that there was any assignment of cars and super allotment above commercial allotments to any mines in 1921.

By Mr. LIVERIGHT (1174):

I think there was a car shortage in the fall of 1922 and the first four months of 1923 in central Pennsylvania. During that time we operated our private cars. Generally speaking, I would say we had a fair supply of coal although from time to time we have had difficulty. As to whether when there was 15 or 25 per cent commercial distribution in central Pennsylvania, we got all that we asked for in the way of private cars, (1175) I do not recall that, because I do not know when 15 or 25 per cent distributions occurred. I think

2801 we probably had some moderate difficulties in moving our private cars but, generally speaking, they moved fairly well. Those minor difficulties certainly were not due to the withholding of the cars. The cars were not put in at our mines in numbers exceeding 100 per cent of our ratings. (1176) The cars might have been put on our sidings, but whenever we get 100 per cent of our rating at any mine, we immediately have a complaint from the railroad. We try to operate those cars so that the mines shall have no more cars than they can load. We try to keep it up to capacity and if the cars that are coming in exceed the capacity of the mine we hold them on our sidings, for instance, if you have a breakdown in the mine or something of that sort which might perhaps result in a small accumulation. Since we have had our private cars, we have had mines that have not gotten the full run of cars. (1177) I can not testify accurately as to whether the periods when we got less than the full supply were incidental and insignificant. We have a car record performance. We do not have car checkers and tracers. We keep a record in the department and generally know where they are, because they come in on exchange slips, showing the junction points. We do not have any men employed at junction points or terminals. It is against our policy to put men on the road. We usually let them take their own course and that has resulted in fairly good car supply and movement.

By Mr. CURRY:

Referring to Exhibit R–22, that is supposed to show the potential requirements of the various plants of the Bethlehem Steel Company. (1178) I can not state accurately what the average actual requirements of coal would be for those plants every year or every month or every day, for the reason that it is a varying thing. It fluctuated. When business is low, the requirement goes down. When business is good, it goes up. The requirement of a plant depends to what

2802 extent that particular plant is operated. Some times a plant might require 200 or 250 cars a day and another plant might require only 60 cars a day, etc.

By Mr. F. BALLARD:

If we had our seven plants all operating at their potential capacity, they would need coal at the annual rate shown on Exhibit 22. That is as definite an answer as I can give to the question of our average actual requirements. (1179) If they were all operating at 50 per cent of their potential capacity, they would need one-half that much.

By Mr. F. BALLARD:

I do not recall at any time they operated up to full capacity over a period of the last two years. I am not in a position to estimate the requirements of coal for these plants in the aggregate during the last two years.

By Mr. BROWN:

As to how we can get a steady, continuous, understandable and appreciable amount of coal unless there shall be a steady demand, it is certainly steady with the conduct of the business. If you put on a furnace, you require so much more coal. It takes several weeks or months to get up production or decrease production in a steel plant. It can not be done over night. If we keep some of this coal in storage in our cars, it is in our own plant, but I do not understand that we do. At Bethlethem, for instance, we have seven blast furnaces. They take a certain amount of coke which requires a certain amount of coal. That is one requirement. At Steelton, if you please, we have five blast furnaces, and that takes a certain amount of coke which requires a certain amount of coal, and so there are two different requirements. If you take off one of those blast furnaces, it might not require so much coke. If you put on a blast furnace, you increase the requirements.

By Mr. CURRY: (1181)

2803 Our private cars are not all in service now. We have perhaps five or six hundred of them at the plants out of use. The reason for that is we haven't the requirement of coal and we are not shipping so we do not use the cars. The remaining cars are sufficient to meet our requirements. During the car shortage period, 1922 and 1923, our private cars were used from our own mines to secure coal for our various plants. To such mines as they were placed, we furnished them an intermittent supply. Some days it was full and some days it was not.

By Mr. F. BALLARD: (1182)

We did not use system cars at any of those mines.

By Mr. CURRY:

We used only private cars at our mines for the full output of those mines. Of course, if the railroad would bunch on a particular day, that mine might not have a full supply. If on an off day we did not have any private cars there, we would not ask for any distribution of the system cars. (1185) We never have demanded system cars at these private car, company owned, entire output, home consumption mines, even though, as I understand the rule, we would be entitled to system cars on a certain day. (1186) Our private cars are shipped practically to all of our plants—to all of the plants on this Exhibit R-22, for example. I do not know what per cent of the coal used by those plants moves in our private cars. As to whether it is 25 per cent, it is not. It is a very great percentage. It is over 50 per cent. Generally speaking, our private cars were operated at a loss. It is the same operation with every industry, I assume, that owns private cars. I know they were operated at a loss, but the specific (1187) figures I can not give. The question

2804 of increasing the allowance for those cars has not been taken up with the railroads by us. I am sure that since these cars

ere purchased they have enabled our mines to secure a greater pply of cars than they would have received had we not owned those ivate cars. I base that on the testimony which I have previously ven that during a time of car shortage, (1188) in operating private rs to those company owned, entire output, home consumption ines we get more private cars than we would get under the system ar distribution. I would say that was true as to our Pennsylvania ines during the shopmen's strike last year and was true as to our West Virginia mines. (1189) As I understand it, the coal car distribution per cent on Exhibit R–24 represented the coal car distribution in the Alleghany district as compiled by the American Railway Association in the period mentioned, and it is the percentage of the cars placed at the mines as compared with the cars required. What I purported to show by this exhibit was the trend of the car distribution, the trend of the coal cars loaded, and the facts as to serviceable locomotives stored, (1190) together with the production of coal for the entire country, which I said, in my opinion, indicated that a coal car shortage had nothing to do with a locomotive shortage in any way, and that was rather caused by the overdevelopment in the coal industry and the broader demand for cars. One of my deductions from this exhibit is that there was no locomotive shortage during this period and also that there was no shortage of tracks or terminals to handle the peak movement, for it was in fact handled. I did not examine the records of the American Railway Association to ascertain the ratio of cars left over to be moved to cars moved during these various periods, but, I assume, that if, for instance, there was a heavy movement one day and a very heavy movement next day, (1191) and a continuing heavy movement, 2805 the movement must have been made, with this volume of traffic that is shown in this report actually moving. I did not ascertain or attempt to ascertain in making up this exhibit any figures or any facts that would show whether or not these locomotives were unable to handle this traffic that was currently supplied them, other than the figures that I show here. I did not make an analysis of these figures showing serviceable locomotives stored, as to passenger, freight, and switching, for each one of the lines in the Alleghany district and do not know whether or not any of these 22 freight locomotives (1192) shown on August 7, 1920, were of such a character that they could have been used in the coal business. They are stored as serviceable locomotives. I don't know whether or not it is the practice to keep in storage a number of more or less obsolete locomotives and show them as stored locomotives. (1193) In my opinon car distribution absolutely necessarily does not have anything to do with the locomotive shortage. You might have an overdeveloped coal industry and you might have a tremendous demand from thousands of mines for cars and you might have idle power on your railroad. As to my railroad experience, I had 21 years with the Pennsylvania Railroad, in the traffic department.

By Mr. F. BALLARD: (1194)

The last office I held there was assistant general freight agent.

By Mr. CURRY:

I did not have anything to do with transportation matters except by association. I did not have anything to do with the assignment of cars or distribution of cars.

LOUIS C. BIHLER (1195), called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. MACVEAGH: (1196)

I am traffic manager of the Carnegie Steel Company and have been connected with that company since April, 1895, ex-
2806 clusively in the traffic department. I was connected with it before it became a subsidiary company of the United States Steel Corporation, which it is now. There is a traffic committee composed of the traffic managers of the subsidiary companies of the United States Steel Corporation, of which I am a member and vice chairman. That committee meets monthly and in between times if necessary. I am familiar with the traffic conditions of substantially all of the subsidiary companies of the United States Steel Corporation. (1197) I am prepared to testify as representing the subsidiary companies of the Steel Corporation, who have made the application here for the reconsideration of the findings in this matter, namely, the Illinois Steel Company, the Carnegie Steel Company, the American Steel & Wire Company, the National Tube Company, the American Sheet & Tin Plate Company, the United States Fuel Company, the United States Coal & Coke Company, and the H. C. Frick Coke Company. The manufacturing companies are all engaged in the manufacture of steel products at mills located in the respective steel producing districts in Ohio, West Virginia, Indiana, Illinois, and in the western part of Pennsylvania. The mills of the Illinois Steel Company are located at Gary, Indiana; South Chicago and Joliet, Illinois; and Milwaukee, Wisconsin. The mills of the Carnegie Steel Company are located in Ohio and in the (1198) western part of Pennsylvania. The American Steel & Wire Company has mills in New England and at various places in the official classification territory. The National Tube Company's mills are located in Ohio, West Virginia, and in the western part of Pennsylvania. The American Sheet & Tin Plate Company's mills are located in West Virginia, Ohio, Indiana, and in the western part of Pennsylvania. The United States Coal & Coke Company, United States Fuel Company, the H. C. Frick Coke Company, National Mining Company, and Sharon Coal & Limestone Com-
2807 pany are fuel companies which furnish coal to the mills named. All of these steel and fuel companies are subsidiaries of the United States Steel Corporation. The mines of the United States Coal & Coke Company are located at (1) Gary, West Virginia, on the Norfolk & Western; (2) Lynch, Kentucky, on the

Louisville & Nashville; and (3) at Philippi, West Virginia, on the Baltimore & Ohio railroads. The United States Fuel Company's mines are located at points in the States of Illinois and Indiana. The mines of the other fuel companies are located in the coal producing districts in the western part of Pennsylvania and are served by the Baltimore & Ohio, Pittsburgh & Lake Erie, Pennsylvania, and Montour railroads. (1199) All coal shipped from the mines of these various fuel companies is forwarded to the different plants of the steel companies. None of this coal is sold commercially in the open market. The United States Coal & Coke Company has 2,240 50-ton self clearing steel hopper cars, which are usually employed in transporting coal from the Lynch mines in Kentucky to the mills of the Illinois Steel Company in the Chicago steel producing district. The Frick Coke Company owns 1,314 70-ton standard self clearing steel hopper cars, which are usually employed in transporting coal from the mines of the coke company in the western part of Pennsylvania to the by-product coke plants of the American Steel & Wire Company, National Tube Company, and the Carnegie Steel Company located in the same State and also in the States of Ohio and West Virginia. Large quantities of coal are shipped also from the mines of the Frick Coke Company to the various plants in railroad owned cars, but all the coal shipped from the mines on the Norfolk & Western in the State of West Virginia is shipped in railroad owned cars. No private cars are used in that latter service. Owing to the inability of the railroad companies to supply sufficient cars
2808 and their statement of lack of finances, the manufacturing companies were unable to obtain (1200) a sufficient supply of coal to operate their by-product ovens and mills, and at the suggestions and recommendations of the railroads a large number of private cars were provided to handle a portion of this coal tonnage, which was necessary to insure reasonable operation of the manufacturing plants and to assist the railroad situation. In the manufacture of steel, coal is the most important raw material and a regular and continuous supply is required daily. Several tons are required to produce a ton of finished steel. The blast furnaces and coke ovens are operated continuously for 24 hours, three shifts of eight hours each, seven days a week as to blast furnaces, and six ovens and six days a week as to steel mills. In normal times the various plants of these steel companies require to have shipped by rail, approximately 20,000,000 tons of coal annually, 5,000,000 tons of which are shipped in private cars of these companies. Of this 20,000,000 tons, approximately one half is used in the mills for producing gas and steam and one half is used in by-product coke ovens. Of the 5,000,000 tons moved in private cars, approximately 25 per cent is used for gas and steam purposes and 75 per cent in the by-product coke ovens. (1201) Adjacent to many of these steel

mills, the manufacturing companies operate large batteries of by-product coke ovens, at which ovens large tonnages of coal are required to produce the coke used in the manufacture of steel. The gas and tar produced at these by-product coke ovens are used in various ways in connection with the operations of the steel plants. If not so used, the plants would be compelled to use natural gas, if available, or, if not, to use additional coal, to replace this by-product gas. In some of the districts where the ovens are located, natural gas is not produced, and in other districts where it is pro-
2809 duced, the supply is so limited that the plants could not obtain the necessary supply, which would force the use of additional coal, and thus increase the amount of coal which would have to be transported by the railroad companies, and for which an additional car supply would be required. The necessity for providing additional equipment already referred to arises from the following causes, among others. (1) The railroads are not equipped with sufficient cars to enable them to handle the demands for transportation, and (2) during normal times the car supply situation in certain districts producing the special grade of coal required is such that the originating carriers have not (1202) the necessary cars available for placement at the mines. The investment by these various companies of large sums of money in private cars to be used for transporting coal was not because of any desire to obtain special privileges, or with the expectation of an adequate return on the investment. As is commonly known, the ownership of private cars in and of itself is not an economy, but an expense and burden to the owners. But these companies were compelled, by the stress of circumstances, to furnish the equipment in order to secure the raw materials necessary to operate their mills. Unless private cars are available for the transportation of the coal it will become necessary, at times, to close down part of these mills, to curtail manufacture, and to throw out of employment many thousands of men, not only those employed in the mills and coal mines, but also men employed at the limestone quarries, the iron ore mines, as well as employees of the steamship companies and railroad companies which transport these commodities, and employees of the countless number of customers who are dependent upon the product of these mills for the operation of their plants. The
2810 Illinois Steel Company operates large batteries of by-product coke ovens at Gary, Indiana, and at Joliet (1203), Illinois. The entire operation of the Gary Heat, Light, and Water Company, a public utility, which serves the population in the Gary district comprising about 70,000 people, are dependent upon the uninterrupted operation of the by-product coke ovens, and the plant which it serves, and which in turn depend upon the continuous supply of this particular kind of coal. The Illinois company found it necessary to secure its high volatile coals from fields that could furnish a regular daily supply sufficient to keep the ovens in operation. For

this purpose large tracts of coal lands were purchased by the United States Coal & Coke Company at Lynch, near Benham, Kentucky, on the Louisville & Nashville. The Louisville & Nashville advised the steel and fuel companies that over a period of time it could not supply cars necessary to keep the Lynch mines continuously in operation so as to supply the daily requirements of the coke ovens. For this reason the Coal & Coke Company was compelled to acquire the 2240 private cars for this traffic. The Carnegie Steel Company also operates by-product coke ovens adjacent to its Farrell plant in the State of Pennsylvania. The coal is secured from the mines of the Frick Coke Company in the western part of Pennsylvania and is transported both in private cars of the Coke Company (1204) and in railroad owned cars over the lines of the Pennsylvania and New York Central. These private cars were put into this trade because of the insufficiency of railroad-owned cars. The Carnegie Steel Company also receives by rail quantities of gas and steam coal at its various plants, which coal is transported from the mines in the western part of Pennsylvania both in private cars and in railroad-owned cars. These private cars are likewise used to augment the supply of cars owned by the railroads. In addition to the
2811 private cars of the Frick Coke Company used in transporting coal to the mills of the Carnegie Steel Company, the Steel Company owns 1,750 50-ton standard self-clearing steel-hopper cars, which are similarly used to augment the car supply of the railroads. Large tonnages of steam coal are used by the American Steel & Wire Company, at its mills in the Cleveland district. This coal is purchased from commercial mines and is shipped in private cars of the Wire Company from the No. 8 Ohio District. These cars are used exclusively in intrastate traffic. They were purchased by the wire company to the number of 225 70-ton standard steel hoppers, only after the railroad companies had notified that company of their inability to provide sufficient coal cars for the movement of this steam coal. The use (1205) of these private cars from the No. 8 Ohio district to the mills in the Cleveland steel-producing district in no way interferes either with the supply of cars to or the movement of the cars from other mines in the No. 8 district. In the Cleveland district in 1919 and 1920, prior to the acquisition of these 225 cars, the wire company's production had been curtailed by twenty to thirty per cent because of its inability to get coal to operate its mills. If these cars are taken out of this trade the situation would be in the time of car shortage as it was a few years ago, and no other shippers of coal shipped would be benefitted thereby. Since the delivery of the cars the mines have been able to operate continuously and these mills have not lost any production through the shortage of coal. Employees at both the mines and the mills have been given steady employment and the wire company has been able to meet the needs of the general public for its products. The wire company also operates by-product ovens in the Cleveland district. Large tonnages of coal used for the manu-

facture of coke at these ovens are secured from the mines of the Frick Coke Company in the western part of Pennsylvania.
2812 Seventy-five per cent of this coal is transported in private cars of the coke company over the lines of the Pennsylvania, Baltimore & Ohio, and New York Central lines. (1206) The tube company operates a large by-product coke plant at Lorain, in the State of Ohio. This coal is shipped from the Pennsylvania mines in private cars of affiliated mining companies and is transported over the lines of the Pennsylvania, Balitmore & Ohio, and New York Central railroads. By-product coke is also produced at the Benwood plants of the tube company in West Virginia. The coal for these ovens is secured from the Pennsylvania mines of the Frick Coke Company, and moves partly in private cars of the affiliated companies. The Sheet & Tin Plate Company operates a large number of sheet and tin plate mills in the districts hereinbefore referred to, consuming large tonnages of gas and steam coal, which is moved partly in private cars owned by affiliated companies from the various mines of the Frick company and affiliated interests. The private cars of all these companies are used for augmenting the supply of railroad-owned cars. In no manner does their use interfere with the supply of cars to other mines in the same locality or with the transportation from such mines. We believe the use of these private coal cars has resulted in the other mines securing a larger supply of cars than they would have received if the private cars had not been in use. (1207) The use of private cars for transporting coal to steel mines and coke ovens is economically sound, both from the standpoint of manufacturing and of transportation; no steel manufacturing company has ever charged discrimination in their use in favor of another competitive steel company. When coal can be obtained and stored, the manufacturing companies generally carry a sufficient supply of coal in stock to balance over
2813 any ordinary period of irregular coal supply and for the purpose of providing against interrupted transportation services and railroad car shortage. One of the principal objections to carrying large tonnages of coal in stock is that the coal deteriorates from exposure and from breakage in rehandling; this is particularly true as to the higher sulphur and coking coals. There is also a loss from heating and firing of the stock pile, and to avoid a total loss it becomes necessary to lift the coal often and at very inconvenient times. To provide enough coal in stock sufficient to cover any long interruption of coal supply it would be necessary to invest very large sums—almost prohibitive—in storage facilities to lift the coal rapidly enough for continuous operation; in addition to this expense there would be (1208) carrying charges, the expense of handling and rehandling, and the loss from deterioration and fire hereinbefore referred to. I have heard the testimony of Mr. Rust, Mr. Schwab, and Mr. Campbell. I unqualifiedly agree with their testimony in regard to the absolute necessity to the steel industry in this country for the use of private cars in the steel industry.

Cross-examination by Mr. BROWN:

The total number of private cars for the affiliated companies of the United States Steel Corporation is about 5,200 all told in road haul service at the present time. (1209) Besides the 2,250 cars used in the Kentucky fields and 1,314 in Pennsylvania, 1,750 [go] to the Carnegie Steel Company and 250 to the wire company. Those round figures were the original purchases. Some have been destroyed since then. There are a number of our cars that have been in the service a good many years; some of them as far back as 1917. The cars were purchased some time in 1917, 1918, 1919, 1920, and 1921. The
cause of our purchase of these private cars was the interfer-
2814 ence of the operation of our plants due to the situation resulting from the war and other causes. After the war was over general business took a spurt and transportation increased, and enough cars were not there and we helped out. (1210) As to these cars, I think we are entitled to the use of our property so long as no one else is injured thereby. Those cars were not built for the Railroad Administratiton. They were built by several car companies, the Pressed Steel Car Company, the Standard Steel Car Company, Ralston, and others. (1211) The investment we have in those cars is, in round figures, $16,000,000. It is my conclusion that in order to operate effectively and make money adequately and to serve the public, our customers, and to deliver on contract we must have private cars.

By Mr. LIVERIGHT: (1212)

Coal from Gary, West Virginia, is principally coking coal. It is transported from the mine to the plant in railroad owned cars by the Norfolk & Western and Pennsylvania, or sometimes the Erie beyond. The Philippi mine is on the Baltimore & Ohio. Its coal is transported mostly, I believe, in railroad cars; occasionally individual cars that get in there. I don't know how much coal we produce at Philippi. I have not individual figures. It is a fairly large operation. That coal is used for coking. As to where it is consumed, (1213) that is a matter of distribution by the mining company. I presume several of the companies who have coke plants, as I have described, participate in the use of that coal. My understanding is that the great proportion of that coal moves in B. & O. system cars. I should say 75 per cent of the American Steel & Wire Company coking coal is shipped in system cars from the lower Connellsville region in Pennsylvania to by-product ovens at New-
burgh, a suburb of Cleveland, in the Cleveland district. That
2815 coal can move over the Pennsylvania, the Baltimore & Ohio, or the New York Central. It is produced at mines of the Frick Coke Company. As to how much of the total consumption of the National Tube Company moves in system cars, (1214) of the by-product coking coal from the Frick Coke Company, it is approximately 75 per cent to Lorain. The National Tube Company also have steam coal. They get that from southern Ohio for the

Lorain plant in railroad cars principally of the Wheeling & Lake Erie. I think some moves Pennsylvania also. I believe these coals that have been moving in system cars have done that for a number of years. I don't know what year the Lorain plant was built. It was changed from a wire mill into a tube company after the Steel Corporation was formed in 1901, and the National Tube Company had no individual cars of their own when they got their coal, so I should say, since the Lorain plant was built, these coals have been moving in system cars. That might be 16, 17, or 18 years. (1215) As to the Carnegie Steel Company we try to get as many system cars as we can right along. We do not get 100 per cent coal at any time in private cars. I said 25 per cent of the coal came in private cars and the remainder in railroad owned cars. As to the Carnegie Steel Company, the percentage might be a little different. I grouped the percentage and totals, speaking from a corporation standpoint. It is a grouping of subsidiary companies.

By Mr. BOYD:

The United States Coal & Coke Company mine at Lynch, Kentucky, is a good size mine. I do not recall the rating. (1216) The coal shipped from Lynch moves to the Illinois Steel Company in the Chicago district, to Gary, Ind., and Joliet, Ill. We have roughly about 2,200 cars engaged in that work. The turnaround from the mines at Lynch to destination and return varies. 2816 Sometimes it is better than others. The average would be 16 or 17 days. It has frequently been longer. We have men watching the movement of those cars to see that no delay occurs. (1217) We have one man at Cincinnati and another at Columbus. Their business is to report the passing through, and keep the car in view, and if there is any trouble, to take protective steps in advance, so far as we may, in case the railroad is going to fall down on deliveries. That is all they do, to follow the movement. They ask no preference and are instructed not to. We operated the mines at Lynch and depended upon system cars for our service for probably three years. My understanding is that the Lynch mines were opened in 1916–17. It took some time to develop them and make a regular mine. As to whether we had a long enough period to determine whether or not the service would be satisfactory, we did, (1218) but we could not get the coal we wanted during that period. We could not light the ovens and could not make the coke at Chicago because of lack of coal. We would not have been inclined to make this investment in private cars had the Louisville & Nashville provided sufficient equipment to serve us satisfactorily. We are not in the transportation business. We are in the steel business. We were forced to do so in order to carry out our contract obligations on deliveries of steel, and that was all that was left, to buy private cars to get the fuel of the kind and character. I am reasonably sure that in no period since we have been operating the private cars from Lynch has the United States Coal Company sold coal commercially.

The coal was taken from us during the service order periods, confiscated. We did not sell that. (1219) We are simply furnishing our supply of coal so as to be self-contained so far as we can. Our Lynch mines are located at the extreme end of the mines operating in Harlan County. (1220) As to regularity of service since
2817 we placed our private cars in operation, it was not all we wanted, but about all we could expect. The Louisville & Nashville had troubles as a result of the shopmen's strike. The Louisville & Nashville under proper conditions has given reasonably good service so far as we are concerned. I have no knowledge as to the difference in car supply at our mines at Lynch and the so-called commercial mines in the same district. I am not concerned in the other mines. It is my belief that our privately owned cars did not interfere with the distribution of cars among commercial mines. (1221) The capacity or ability of the Louisville & Nashville to handle coal over its Cumberland Valley division is limited but Mr. Smith, the late president, arranged for a bundle of money to correct that situation. We only develop the mines as fast as we need the coal. What we could do, I don't know. As to the ability of the railroad to transport the coal that it is possible to produce on the Cumberland Valley division, I think if the Louisville & Nashville Railroad had the facilities to-day there would be more coal shipped than is being shipped on that division. (1222) Cars have not been placed at our mines regularly during periods of embargo. We have had to fight at times to get coal put in, on exemptions. We have always had valid reasons for it. We have not had a whole lot of embargo trouble on coal, because of the fact that it is continuous operation, 24 hours. I do not know the rated capacity of our mines at Gary, West Virginia, on the Norfolk & Western.

By Mr. GREEVER:

The Norfolk & Western does not have any private cars at any mines on their system and we have no excuse for asking them to make an exception in our favor. (1223) I know nothing of any negotiations looking to the use of private cars on that
2818 railroad by our companies.

By Mr. CURRY:

As to cars acquired by subsidiaries of the United States Steel Corporation, the Carnegie Steel Company acquired 1250 hopper cars August to October, 1917, and 500 hopper cars February, March, and April, 1921; American Steel & Wire Company acquired 225 in October, 1920; H. C. Frick Coke Company, 1314 November, 1917, to June, 1918; and United States Coal & Coke Company, 1400 in August, 1919, and 800 a year later, in 1920. (1224) The Illinois Steel Company has some private tank cars, but no coal carrying cars. The National Tube Company has no coal hoppers, but has private tank cars. The American Sheet & Tin Plate Company have a few gondola cars. Sometimes they throw them into

the coal trade locally for short distances, but it is unimportant. The United States Fuel Company at the present time has no cars of its own. There are 500 cars under order for that company, but they have not been delivered. Approximately 5,000,000 out of the 20,000,000 (1225) tons of coal required by our plants is secured in private cars. Most of the coal which we do not secure in private cars, is from our own mines, although we are also purchasers of coal under contract with outside companies. We are not concerned about the total output or partial output feature. The contract is for so many tons a day. When there is such a contract it is variable, depending upon business conditions and the prime feature of the contract is the quality. I don't know whether we have a maximum and minimum clause in these variable partial output contracts. Those contracts do not come before a traffic manager. I have not made any study with a view to determining whether or not the use of these private cars has, in fact, enabled our mines, the mines from which we purchase (1226), to secure a larger
2819 car supply than if they had to rely merely on the system cars. They secured us a better supply of fuel. As to whether the use of these cars enabled us to have a little fuller car supply than if we had not had these cars, it did help as to our mines.

By Mr. MACVEAGH:

Some of our cars are used substantially entirely in transporting coking coal. Our private cars are for our own mines, to produce coking coal, and are placed there and nowhere else.

OCT. 29, 1923.

W. B. PRESCOTT, (1230) called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. MANCHESTER: (1231)

I am coal and coke agent of the Youngstown Sheet & Tube Company at Youngstown and have been so employed for about seven years. The Youngstown Sheet & Tube Company is a manufacturer of iron and steel products. Its ingot capacity is about three and one-half million tons a year. There are two groups of its plants, one known as the Youngstown group, consisting of a plant at East Youngstown and Brier Hill, Hubbard, and Zanesville, Niles, Warren, and Girard, all in Ohio. The other group is known as the Chicago group, consisting of a plant at Indiana Harbor, South Chicago, Evanston, and Mayville. The company is the owner
2820 of 1334 private coal cars. (1232) The Youngstown Sheet & Tube Company bought 500 cars in 1920 for its own use. In January, 1923, a contract was made which took effect about April, whereby Youngstown bought all the property and assets (1233) of the Brier Hill Steel Company and along with that acquired a little more than 200 coal cars. I don't remember exactly. On July 1, 1923, Youngstown purchased the entire assets of the Steel and Tube Company of America, acquiring among other assets

the balance of these privately owned coal cars, making a total of 834 cars. My experience in dealing with these cars relates particularly to those purchased originally by Youngstown. The annual coal requirements of the Youngstown Sheet & Tube Company are approximately 5,300,000 tons. We divide our coal handling into four different groups; high volatile coking coal, about 2,900,000; low volatile coking coal, 746,000; gas coal, 875,000, and steam coal, 807,000.

By Commissioner ATTCHISON: (1234)

The 5,000,000 figure I gave, as in the case of Bethlehem, is the top figure and would be our maximum requirement. It is not much of an exaggeration, however. I have not the figures as to how much we use. It would be close to the figures I have given. (1235) These figures are the figures we use for contract. That is what I meant by the exaggeration.

By Mr. MANCHESTER: (1236)

We have five coal properties owned in total. One is the Buckeye Coal Company located at Nemacolin, Greene County, Pennsylvania, on the Chartier Southern Railroad Company operated by the Pennsylvania. That company owns 8,400 acres; 894,000 tons per year is the present production based on September production figures, and ultimately we will produce just about double that figure. That is the company of which Mr. Campbell spoke of as being presi-
2821 dent. (1237) The haul from Nemacolin to Youngstown is 138 miles. The next property owned by the company is the Brier Hill Coke Company located at Brier Hill, Fayette County, Pennsylvania, on the Monongahela Railroad, having an acreage of about 500.

By Director BARTEL:

As to the Red Stone Central mentioned in the petition, that is a little road on our own railroad serving the mine, but it connects with the Monongahela Railroad.

By Mr. MANCHESTER:

It is a railroad which has never been operated in fact. That mine and the Red Stone Central were acquired with the Brier Hill interests. The haul from this mine to Youngstown is 129 miles. On the present basis the output of that mine is about 250,000 to 255,000 tons annually and when we get it up to production it will be about 450,000. (1238) We have coal property in Ohio known as the Redfield Coal Company at Saltillo, Perry County, on the Z. & W. lines of the New York Central. The acreage is 2,017; annual production based on present facilities, 68,000 tons. There will be no further development so far as we know. The coal is used principally at our Zanesville plant which is located 15 miles distant from the mine. The next property owned by the company is the Christian Colliery Company with a mine located at Mahan, Fayette County,

W. Va., on the C. & O. Railroad. We have an acreage there of 3,350. The annual production is 160,000 tons and there will be very little beyond that in the way of development. That coal is used at our Indiana Harbor plant and the haul is 549 miles. The next property (1239) is operated under the name of Youngstown Sheet & Tube Company, and is located at Dehue, Logan County, W. Va., on the C. & O. Railroad. Our production there now is about half a million tons annually. The acreage is 6,000 and the haul about 543 miles, the coal being used at Indiana Harbor. Those are
2822 the only mines we own in total. We have a partial interest in four mines located in southern West Virginia and eastern Kentucky operated under the name of the Elkhorn-Piney Coal and Coke Company. One of them is known as Weeksbury, located at Weeksbury, Flood County, Ky., on the C. & O. Railroad. Another is known as Powellton (two or three mines), located at Powellton, Fayette County, W. Va., on the C. & O. The Stanaford [mine] is located at Stanaford, Raleigh County, W. Va., on the C. & O. The first two are high volatile coals, and the last one is a low volatile coal. (1240) Weeksbury we own and are entitled to 25 per cent of the currently monthly output; Powellton, 47.5 per cent, and Stanaford, 25 per cent. In respect to those mines the amount which we are entitled to take is in proportion to our ownership in the mine. With respect to all of the other coal properties I have described the Youngstown is the sole owner. We have an interest in another property that is not operating and has not been for some time, known as the St. Clair Mining Company, located at Eagle, W. Va. As to these mines in which we have partial ownership, we have nothing whatever to say about the operating policy or management, but in the mines that we own 100 per cent, the only mine from which we have been obliged to sell coal commercially, (1241) is located in Ohio, and the reason is that the coal is used principally at our Zanesville plant for gas producer work and steam and in order to get the required grade of coal it is necessary to follow a certain screening practice and in doing that we get a resultant of about 3,000 tons monthly of what is known as six-inch lump coal. We sell that whenever we can for domestic purposes in that territory, and that is the only coal we sell commercially, all the other coal being used at the plant. As to the Redfield coal, there is a production now of 8,500 tons a month. We use about 5,500 at Zanesville split up into gas and steam size and about 3,000 tons we sell. That
2823 is not of such a character that we can use it economically in the plants at Zanesville. (1242) We have not used any of these assigned cars at any time for the sale of any of this commercial coal. My understanding of an assigned car is one that is placed at a mine, assigned or consigned to a mine, even though it be in excess of its distributive share for a particular day, and for which there is no subsequent equalization. These coal cars were bought to protect our by-product requirements, and except in very rare instances we never use them for any other purpose. I am talking

now about the 500 cars we had originally. We have used them almost altogether at our mine at Nemacolin for by-product high volatile coking coal. That is the most important coal that we require in our business. (1243) We buy some coal from commercial mines, principally from the Pittsburgh Coal Company, the Hillman Coal & Coke Company, and B. Nichol & Company, Inc., who are sales agents for the Pittsburgh Terminal Coal Company. All of these companies operate in the Pittsburgh district. We use our cars in connection with coal purchased from these three companies whenever we have had any excess of the requirements at our own mine. We have always hauled in them coal suitable for by-product purposes, high volatile coal. We have never used the cars for low volatile, excepting in 1922, we sent some over into Somerset County when our regular supply from the Pocahontas field was very seriously curtailed. With respect to storage at both of our plants, namely, at Youngstown where we have two by-product plants, one at Brier Hill plant, and one at East Youngstown plant; and at Indiana Harbor where our other by-product plant is located. the storage capacity is very limited. (1244) I would say at Indiana Harbor we can store about a quarter of a million tons. which would be approximately 70 days of high and low volatile coking coal. At East Youngstown our capacity is
less than that, about 200,000 tons, which would be
2824 a little less than a month. At Chicago, on account of the long haul it is desirable and necessary to carry a larger storage than at Youngstown. We try to go into the winter with a supply at Indiana Harbor that will guard against any possible shortage of transportation over the winter. With respect to the testimony from various witnesses as to conditions in 1920 and prior thereto in times of car shortage, we experienced a similar situation in the coal requirements of the Youngstown Sheet & Tube Company. Following our experiences in 1920 we made some investigation concerning the use of private cars in order to assure an adequate and continuous supply of the right quality of coal for the purposes of our company. (1245) When the question of purchasing the cars was first brought up, naturally we made some investigation as to the advisability of doing it, and I was present at interviews that some of our executives had with the railroad people both in Pittsburgh and in New York, as well as an interview we had with Commissioner Clark, who was at that time chairman of the Interstate Commerce Commission. We gathered from all the talks that we had that it was hopeless to look for any assistance from the railroads because of their inability to furnish these cars, which we understood to be because of the lack of funds, and that we would not only be helping ourselves, but helping the general situation by buying these cars. After that investigation we bought the cars. Our experience naturally would indicate to us that without these private cars we would not be able to avail ourselves of a regular and adequate supply of coal in the tonnage

and of the quality we require for by-product purposes. (1246) The use of the cars between Nemacolin and East Youngstown is beneficial to the carrier in that it enables us to furnish regularly a certain amount of business. In addition to that we so handle our forces at both ends of the haul that we assemble these cars, both loaded
2825 and empty, and deliver them to the railroad without any switching or service from them and they are so handled by the railroad as to avoid any yarding or taking up of any facilities excepting a road haul. Whether we trace these cars or follow them on the railroad depends a whole lot on the condition. Of course, if we are having any difficulty in getting the cars through, naturally we devote more time to watching them, but there is a comparatively short haul involved and we have never had any trouble to speak of, excepting in the real stress time. (1247) I am not so clear as to the extent to which we assemble trainload lots of cars at the mines and at the plants. My impression is that we usally deliver them in lots of 50 cars which, as we understand it, is an economical move to haul for the railroad. We use our best efforts to facilitate the handling of the cars by assembling them in suitable numbers for transportation readily at both ends of the route. We have no contracts with the railroad company covering the hauling of cars.

Cross-examination by Mr. BROWN:

Our coal requirements in 1920 were about as great as they are to-day. We could not haul the coal we required, or anywhere near it, in the 500 cars we owned then. (1248) We made up our requirements from system cars. From the time we purchased the cars and put them in operation, which was in November, 1920, up to and including the past September, we originated about 51 per cent of our requirements in our own cars, that is these 500 cars. That did not include our Chicago as well as our Ohio plants. Our 500
2826 cars were only used in our Ohio plant. In the two hauls from our two mines to our Youngstown plant I think there are two railroad crews used in getting the coal from our mines to our plant, that is there is a freight division somewhere in there. (1249) We had the Nemacolin mine before we bought the cars. We started to develop this mine during the war and we are only about half way finished now. Prior to the war we did not own any coal mines. We started to develop—we bought the acreage, I think, prior to the war. (1250) As to whether any one connected with the commission indicated to us that if we had our own cars, they were not to be counted against the distributive share of the mines which they served, I don't think that was discussed. We just came down here for general information as to whether or not we could look for any improvement in the railroad situation and we found we could not. At least we got that impression. I have been coal agent since May 1917. (1251) When we tender cars to the railroad we expect them to come back from our mines just as soon as they can get them back and keep our properties operating continuously.

By Commissioner AITCHISON:

Commissioner Clark did not tell us that we could have preferential use of these cars over and above the commercial allotment. That feature of the thing was not discussed with him at all. We did not discuss whether in times of car shortage motive power shortage, trouble at terminals, or the like (1252) we would have to take our chances with other commercial operators. We did not go into those features at all. I don't think we even discussed whether if we got the cars the railroads would be able to take them away from us and give them to our rivals or somebody else. We came down mostly to find out from Commissioner Clark, knowing that he was
2827 conversant with the general railroad situation, whether or not there was a possibility of the railroads being in a position some time in the future of giving us a service that we thought we required. As we understood it then, it was a shortage of cars and we gained an impression from the commission that because of a lack of funds, having just come out of Government control, it would be some time possibly before the railroad could provide these facilities and that if we wanted them and needed them badly enough, we had better do what we contemplated doing. I knew what was going on at that time in Pittsburgh and in the Valley. (1253) As to whether it was what was called an outlaw switchmen's strike which extended over a considerable period of time that made a very aggravated service situation, my answer is, "Yes." That had a very material effect on the service the carriers were giving.

By Mr. LIVERIGHT:

As to the 49 per cent of our coal requirements not moving in our own cars, high volatile coking coal and low volatile coking coal are moved in system cars. We seldom originate any low volatile coking coal in our own cars because we draw it ordinarily from the N. & W., and their service, outside of a few months last year, was as good as could be expected. (1254) As to the 49 per cent of our coal which moves in system cars, it moves principally over the Pennsylvania and the P. & L. E. in the Pittsburgh district. The P. & L. E. ordinarily has a very good car supply. The Pennsylvania has a fair car supply, I would say, but particularly bad as between divisions, on the P. B. & O., which is now known as the Monongahela division, on which our mine is located. It is on the Chartier Southern, but that is a continuation of the Monongahela division. There is no division on the Chartier Southern. It is just a little bit of a road. We always refer to it as a paper railroad. It is owned jointly by the New York Central, and Pennsylvania and the Baltimore & Ohio. When I say the supply on the Pennsylvania varies as between divisions, I just assume that. I do not
2828 know. By that I mean divisions like the Conemaugh division and the Monongahela division, and the Pittsburgh division. It is not always the same. (1255) As to whether those divisions

that have assigned cars, private cars, have a very good supply and the others a very poor supply, I would not say that. I know just casually. I do not pretend to follow it closely. We acquired a large proportion of our cars, namely 834, when we took possession of the physical assets of the Brier Hill in April I think, 1923, and of the Steel and Tube Company of America in July, 1923. We have not actually had a chance to test the question whether or not these cars are necessary for our purposes, but we know that generally speaking the conditions that obtain at our plant would obtain at the western plants and possibly more so because of the longer haul involved. In 1923, following April, there has been generally speaking, a full car supply. At least there have been enough cars to satisfy the demand for coal. It is not full. (1256) Knowing the situation on the C. & O., I would rather imagine these 834 cars were essential. I don't know, of course. Since April 1, 1923, the C. & O. has had a good car supply, but not a full car supply. We have a mine on the C. & O. that is more or less dependent upon railroad cars, the Mahan mine I mentioned, and we are down very often on account of lack of cars. At least they tell us that. How often we have been down since April 1, 1923, at that mine is an operating problem and I do not pretend to follow it, but I would say off hand, four or five days a month, and possibly more. It would not go as high as 75 or 80 per cent car supply. The present car supply on the C. & O. I think is about 60 per cent, that is, the cars that are placed against orders.

2829 By Director BARTEL: (1267):

As to whether the percentage of distribution on the C. & O. is over 80 per cent at the present time, it may be. I do not follow that very closely.

By Mr. LIVERIGHT:

The haul from the Logan County mine is 543 miles to Indiana Harbor, and from the Fayette County mine, 549 miles. They are just about the same. We do not move any part of the domestic coal produced at the Redfield mine in private cars. That is all moved in system cars. (1258) We have 15 private cars in that service between Zanesville and Redfield, and that is a new acquisition. The distance is only 15 miles. I know we get the system cars in addition to the private cars. My idea is that they serve the Zanesville plant certain days in the week, and run full on the private cars. That takes care of them for the week. Of course, while they are loading those private cars, it necessarily follows they must load system cars, because of the fact that we load this resultant lump. I suppose that follows. I don't think we devote the operation of the mine exclusively to the plant needs on any particular days. (1260) We have had this mine in Ohio only since July 1st. We acquired that with the Steel & Tube Company of America. At that mine we really have not had any opportunity to test the

uestion of car shortage. (1261) Brier Hill is another case that do not know much about. We just took that over this year. As o Nemacolin, the Youngstown mine, I would say we have very eldom used system cars at that mine since 1920. I do not know xactly. The only time we ever use them is when there is a lisability on the part of the railroad company in serving the mine with our private cars, and that is not very often. As to whether, when there is such a disability, we get system cars up to our
2830 full requirements, to make up for the private cars that can not reach the operation, we never have, because of that division being short of cars ordinarily. (1262) As to whether there are occasions when we can not get the full use of our private cars, because of transportation disability, such as motive power, terminal congestion, siding congestion, or things of that character, I would not express it that way. I would say disability on the part of the railroad company other than car shortage—I do not know what it is, but they have not been able to serve us with our cars 100 per cent all the time, even though we have had them available. (1263) I would not say that we get from this mine, 138 miles distant from our plant, practically an express service. In some cases it is a through shuttle service, and in some it is not. I would say it was in most cases. (1264) My opinion is that we have never asked and never expected preferential treatment in the distribution of motive power or any facility of the railroad beyond cars. The only preference we desire is in the matter of cars.

By Commissioner AITCHISON:

As to whether it is my observation that what is commonly called a car shortage may result at times from something besides the fact (1265) that the carrier or carriers generally do not own enough cars, my answer is, "Yes." If there is a shortage of cars in number, naturally we would expect to get our share of them. If that shortage in number is caused by the fact that the carrier may have an abundance of cars upon other portions of its line, but, due to some disability, such as strikes, sabotage, lack of repair facilities, etc., is unable to move them where we want them at the time we want them, I would not claim preference at such a time. (1266)
2831 Our claim for preference is only in a case where the precise and dominant cause of the car shortage is, in fact, exactly what those words mean, a shortage of cars, and not a shortage of something else, which has the effect that the carrier does not have enough cars at the time to place them where wanted. In other words, if there are a certain number of other facilities, motive power, terminal facilities, and track facilities available for a given number of mines all we expect and have ever asked for is our share of the facilities. (1266) If the carrier has a strike on at a terminal point, so that it can only get a limited quantity through to the mines and back again, and less than the rated capacity of the mines (1267), I would not claim preference for our private cars.

I claim the right to have them placed at the mines over and above the quantity based on the rated capacity, which other mines get, dependent on system cars, provided they have all these other facilities referred to and can do it.

By Mr. LIVERIGHT:

There are no competitive mines near the Nemacolin on that side of the river. There is another mine about five and a half miles closer to Pittsburgh, owned by the Crucible Steel Company, and I think those are the only two mines on the Chartier Southern. I don't know that it is a private car mine. It is a river mine, I think. They take their coal by the river. There are no commercial mines on that particular division. There are mines farther up, I would say 10 to 15 miles. Between Brownsville and Crucible (1268) there are several commercial mines. Some of them are private and some system car mines. The service at the mines dependent on system car supply has not been as good as at the private car mines. The service has been much shorter and the mines have worked
2832 much less time. That is the reason we bought the cars. I have never heard of the operators of these mines complaining about the time we are able to work and they are shut down. (1269)

By Mr. ROPIQUET:

If there is a certain rated capacity at a given number of mines and the railroads have the motive power and other facilities to place those cars we expect our share of them, whether they be private cars or railroad owned cars. Beyond that we do not. (1271) As to whether we get any allowance for spotting service, I don't know. I am not qualified to answer that. I don't know that this gathering of cars at our plants and giving them back to the carriers is being paid for by the carrier, but I don't think it is. I don't know exactly.

2833 (1272) We have mines on the Chesapeake & Ohio, some of our own and some that we are partially interested in. We take the whole output of the mines that we own wholly. We have only had the property since July 1, and since that time we have been taking all the tonnage. As to whether the mines in which we have partial ownership sell coal commercially, we have nothing whatever to do with the operating of those mines, (1273) either the policy or management or anything else. We just get 25 per cent of whatever they produce. Our cars do not go to those mines. Our cars down there are used principally at the Dehue mine and if we have any surplus at all we send them to Mahan, which is not very frequently.

By Commissioner AITCHISON:

I think it is so that sometimes the carriers may have plenty of cars, but they have gotten into such a geographical location that on one part of the line they may have more cars than they need and less than they need on another part, although in the aggregate

there may be plenty to carry on all of the business of the carrier, and that that may be in part due to the fact that the shippers may not load or unload as promptly as they would like. (1274) It may be that they get shuffled around in such a way that the cars which are most advantageously designed for particular traffic are not where they can be used the most advantageously; for instance, millside gondolas and hopper bottoms shuffled around in such a way that, although each of them could possibly be used for the same purpose, and in the aggregate be sufficient, there would still not be enough millside gondolas at the mills and enough hopper bottoms at the mines. Again, the shortage may be due to the very act of the receiver of the coal cars in loading the cars and sending them away somewhere else. (1275) I have heard of such cases as those referred to. As to whether, in the instances cited, we should
2834 get a greater allotment placed than placed at commercial mines, it would depend a whole lot on just how much of a culprit we were in abusing this equipment. I think if we were not responsible for those conditions we ought to get our share of it. If the carrier has plenty of equipment, but due to acts of shippers or consignees or congestion or anything else, that equipment gets shuffled onto other portions of the line and is not down in the neighborhood of the coal mines where it can go back and forth to our plants; in such case, if we have our private cars in that neighborhood I think we would expect a preference in placement over and above the commercial allotment.

By Mr. CURRY:

The Youngstown Company installed its by-product coke ovens prior to my being with the company. I think they were being put into operation in the fall of 1916. They were operated after a fashion from that time until the fall of 1920, before the 500 private cars were put on. There were car shortages during that time at points from which we purchased coal. (1277) The only mine we had at that time was this Nemacolin mine and it was in process of development. We put it in during the war and until this past year we have never gotten any real tonnage from it, so that we bought practically all the coal we used. Prior to the purchase of the cars we made both entire output contracts and partial output contracts, depending upon conditions. Sometimes we would have a mine that was of a quality suitable for our needs and in a quantity that they could produce, and we would take the output of the mine. There were others like the Pittsburgh Coal Company who have several mines in the Pittsburgh district, and the quality, generally speaking, from several of them is suitable for our needs, and we just stipulate a tonnage in the contract and give them the right to ship from any of these mines, pro-
2835 vided it met with out satisfaction or requirements. (1278) The only people that we have given those private cars to

outside of our own mines are the Pittsburgh Coal Company, the Hillman Coal & Coke Company, and B. Nichol & Co., the three largest producers of coal in the Pittsburgh district of the quality we require, and from whom ordinarily we buy large tonnages of coal. We have never given those cars outside of one or two small instances to anybody else. We have bought coal outside of those companies. We have been obliged to at times. As to the 500 cars, we first take care of the Nemacolin mine up to its ability to produce, and then beyond that we give the cars, whenever we have them, to these three companies I mentioned. I imagine they take advantage of the assigned car rule at the mines at which those cars are set. We try to give them to them in quantities that will permit of them running solid on a day without interference with their regular coal operations.

By Director BARTEL (1279):

I think in most cases they try to run solid on our private cars on a given day.

By Mr. MANCHESTER (1280):

Our private cars cost $3,525,942. About 50 per cent of the by-product coking coal is hauled in private cars.

E. F. VOGEL, called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. MANCHESTER (1281):

I am assistant works superintendent of the Youngstown Sheet and Tube Company at Youngstown, having under my jurisdiction operations in the Youngstown district, that is, Youngstown, Brier Hill, East Youngstown, Hubbard, Niles, Warren, and Girard, clear through to the finished product. I was formerly superin-
2836 tendent of the by-product coke department, including the East Youngstown plant and the Brier Hill plant, from the time that the company acquired that plant. As such, I have had personal supervision over the operation of the by-product coke plant, particularly at Youngstown. (1283) Our plant is run exclusively for the production of metallurgical coke. That coke is used in our furnaces and it is of the utmost importance that we get coal that is adapted to the production of good blast furnace coke. The Youngstown Sheet & Tube Co. makes pig iron, puddled iron, and open-hearth and Bessemer steel. They make slabs, blooms, billets, sheet bars, lap weld and butt weld pipe, and the skelp for that pipe. They make plates and sheets, wire, rods, bars, nails, and several wire products; also rigid and flexible conduit. (1284) The East Youngstown coke plant consists of 6 batteries of 51 Koppers ovens in each battery, with the necessary equipment for the recovery of all by-products generally recovered at a by-product plant. The Brier Hill coke plant comprises one battery of 84 Koppers ovens with the necessary equipment to recover by-products. The plant at Indiana

Harbor acquired from the Steel & Tube Company of America consists of two batteries of 60 ovens each. That plant is the Semet Solvay plant and is a complete Solvay recovery plant. There is a plant at Mayville consisting of three batteries of 36 Otto Hoffman ovens with the necessary equipment to recover by-products. That plant was shut down when acquired by our company and has been shut down ever since. The Koppers ovens are of the kind and character of ovens described by Mr. Rust, and in fact were built by his company. The statements he made with reference to the operation of coke ovens generally are applicable to those ovens of our company. (1285) As to instances where our operations of these ovens at East Youngstown have been impaired by poor quality of coal, we have had several occasions when we have had some poor coal shipped in,
when we were getting cats and dogs. We have had several
2837 occasions when our companies had to buy coal of all kinds
and sorts and we have had poor coal. I remember particularly one instance where I was called up at half-past two Sunday morning and told by the night man in charge that he had not been able to
push any coke for an hour or more at that time.
2838 (1285) Some of that coke we could not get out until the
following Wednesday or Thursday, and most of it had to be dug out of the ovens with long hoes, from each end of the oven, and some of the ovens we had to dig out all but three feet out of over 37 feet of coke before the pusher would push it out. We found in that case in checking over the coal to try to see what we could get that some Somerset coal had been sent in which was an expanding coal, and that expanded in the oven so tightly that we could not push it out. We have had cases also where we have had coal that was supposed to be a coking coal, and we put it through (1286) the regular operation of unloading and crushing it and mixing it. In order to get a uniform mixture of our coal we crush all the coal so that 75 to 80 per cent of it will go through an 8-inch screen. That is so we get a very intimate mixture, instead of having a mixture of large lumps, in order to get uniform coke. This particular coal was crushed and mixed in the proper manner and started in the oven and went through the coking operation; and when it was time to push the oven, when the doors were taken off, the stuff ran out of the oven like water, just like hot dry sand. That was due to getting a coal that had absolutely no coking qualities. We have cases where changing coal makes a very decided difference in the gas that is produced. It has a higher or lower heat value. If you are using a certain amount of gas regularly and you get a gas that has a lower heat value, your ovens will get cold and you will have trouble and produce a poor coke. (1287) For that reason it is very important to have the same kind of coal, so your gas will be the same. Different coals require more or less gas. If you change your coal, you will find that you will have to change your gas. Of course, that takes several rounds of the regular coking operations before you

can get these heats adjusted properly. In addition to using
2839 gas in the coke ovens themselves, the surplus gas is used at other points in the mill for heating purposes. At our East Youngstown plant we produce approximately 30,000,000 feet of gas every day, all of which is used in the various mills, heating furnaces, etc., for heating the steel. We produce by-products, as described by Mr. Rust in his testimony.

(1288) The next step after the coke oven is the blast furnaces. Blast furnaces are used for smelting iron ore. The iron ore, which is very carefully selected, is charged into the furnaces with the necessary amount of coke for fuel and the necessary amount of limestone for fluxing. Those furnaces must be run every day in the year. You can not shut them down. They must be run uniformly, and you must have uniform materials charged into them. It is not possible to stop a steel blast furnace and start it intermittently; not to have any kind of operation. It costs a great deal of money when a blast furnace is banked, and it can only be done in very rare instances. The material charged into the furnace determines largely the product that is made at the furnace, and if the sulphur, (1289) ash, and phosphorous in the coke is up you are going to get a poor grade of iron. It is going to take more limestone to take care of the ash. You can not carry sulphur and phosphorous over into your iron; that is, in the usual operation of the steel plant. If there is an excess or surplus of phosphorous in your coal, that carries into the iron. As to whether it is possible to reduce the amount to some degree by varying the practice in the blast furnace, my answer is "very little." It takes considerably more limestone to try to take out the sulphur. We can accommodate ourselves very little. It is absolutely essential that we should have a uniform supply [of coal]. The operation of a blast furnace depends more upon
2840 the uniformity than anything else. If the blast furnace goes off, they blame the coke for causing the off iron. The hot iron is taken from the blast furnace in ladles (1290) and put into the mixer, both at the Bessemer plant and at the open-hearthed plant. It is kept in a moulten condition and then that moulten iron is charged into the Bessemer converter, and also charged in the open-hearth furnace, as required. The Bessemer converter is a pear shaped furnace in which pig iron is charged and through which air is blown to take out the impurities, to make steel. It is not possible in our converter to eliminate phosphorous and sulphur. The hot metal goes into our converter as hot pig iron and it is tapped out as steel. Any sulphur or phosphorous that is in the pig iron will remain in the steel. From the Bessemer converter the hot steel is tapped into ladles and poured into ingot moulds.

(1291) An ingot is the form in which the steel is cast after it has been produced. Ingots vary from 20 inches square and six feet high, up to two or three feet or more in cross-section, and six or more feet high. The mould is taken to the stripper and stripped and the ingot is taken to the soaking pits at the blooming mill and is heated

and soaked until it has a uniform heat. In good operation it is never permitted to get entirely cool from the time it goes from the blast furnace. At the blooming mill it is rolled into blooms and then into slabs and billets, while it is still hot, and it goes down through the shape by mills and billet mills. The sulphur and phosphorous which go into your blast furnace with your coke still remain with the metal. (1292) As to the open-hearth process, the mixed pig iron, scrap, and ores of different kinds and the steel alloys to make the grade of steel that is required are put into the furnace. The flame is burned over that charge and is reversed from one side to the other. The gas that is burned is further heated by passing through checkers and the air that is furnished is also heated
2841 by passing through hot checkers. In some places they use coke oven gas and in our particular case we use producer gas in the open-hearth. There is some chance to bring down the sulphur and phosporous in the open-hearth but not in the Bessemer. A variance in our practice is called for to counteract even to a degree the effect of these elements in the open-hearth. If the charge is higher in sulphur, it takes more material combined with that sulphur to take it out of the steel.

(1293) One of our products is pipe. If sulphur and phosphorous is high, you have a grade of steel that can not be welded. When the skelp is brought out of the tube mill in strips to be welded, it will not weld. The process of making pipe consists of bending the skelp into the form of a cylinder and welding the two edges together. In a butt weld pipe, the edges of the pipe are just butted together and in a lap weld pipe (1294) they lap over and the skelp should be made of the proper material and at the proper welding heat. If sulphur and phosphorous are present in the skelp, the material will not stay welded and the pipe will split at the weld. The presence of sulphur and phosphorous most decidedly has an effect upon the threading of pipe. Most of the pipe has to be threaded, and there are numerous different styles of threads for pipe for different purposes, particularly the pipe used in the oil districts for casing and for line pipe. They have to have very long threads and they must be made absolutely accurate. That is because the casing pipe which is used in the long wells is dropped down five or six thousand feet and hangs on the threads. If a well goes dry they pull up the casing. The weight hangs (1295) on every thread up above the lowest portion. If the threads are not made absolutely accurate, you are liable to have the threads stripped and lose the casing. Sheets are one of our products. The sheets required by the automobile trade must have a perfect surface. If not, when the
2842 car is painted or enameled, it will have a rough surface. In addition to that, a great deal of the material used in the automobile industry is used in forming fenders, bodies, etc. It must be of such quality that you can take a flat sheet and press it into the shape which is required in the particular number of machines where it is used. If it is not the proper grade of steel, it

will split and break. (1296) The sulphur and phosphorous which goes into your coke oven in the form of coal is in the finished product. It is very necessary that the coal that you start with should be low in sulphur and phosporous because they go all the way through and are the two most injurious elements in the steel. With respect to storage of coal, at our East Youngstown plant, the coal is usually brought in and spotted on two tracks that run to our car dumper, and we run the coal over the car dumper and dump it. We then run the cars down and couple them up so that they are all ready for the engine to come and take them out. By car dumper, I mean an automatic machine, which automatically takes up and turns the car over. It is a large machine that the car runs on (1297) and the operator starts his controller, and the table is picked up 60 feet in the air and dumps the coal up into our bins over our breakers and crushers, into which it goes and thence to our mixing bins. There it is mixed and goes into the storage bins over the batteries.

Cross-examination by Mr. BROWN:

We very seldom sell coke. We do sell some of the fine stuff that is screened out of the furnace coke. We separate that fine stuff into two grades of material and use the breeze in our own boilers. Some of the other stuff we use, and sometimes we do not. We are not engaged in working up a substitute for bituminous or an-
2843 thracite coal. We run to make that furnace coke, (1298) and consume ordinarily all we make. The coke is taken directly to the blast furnace bins. We have very little storage of coke. It is very bad practice to store coke, because it is broken up in handling, and that spoils the grade of furnace coke.

By Mr. LIVERIGHT:

We get part of the coal used for our by-product purposes at East Youngstown from our Nemacolin mine. Recently we have received a little from the Brier Hill mine, but that is only recently. The sulphur content of the coal in the Nemacolin mine varies a little bit; somewhere about 1.10 or 1.20; sometimes a little higher. It very seldom goes up to as much as two per cent. The only time that we get that is when we get some coal in the development
2844 work. (1299) That mine is being developed, and they are running their headers through, and sometimes we get a little of it that is a little higher. Sulphur at the Brier Hill mine runs about 1.30 per cent; very seldom as high as 2 per cent. Before our company took that mine over it was shut down, and they let it get very dirty. Ordinarily by-product coal is not necessarily less than one per cent in sulphur. We try to make coke one per cent or under at our plant. It would be decidedly better if it was down to .6 or .7, but we do not get coal that will make that grade, even from our own operations. As to whether, in a measure, we do overcome these difficulties of a comparatively high content of sulphur, we do not. The sulphur in the coal goes into coke, and it is better to have uniform coke than very poor coke. (1300)

We do not wash the coal. Sulphur can be washed out of some coal, but the mines that we have are not in that class, where they generally wash coal. It has not been found necessary in that district as yet. If the coal gets poorer as the mines are being exhausted it will probably be necessary to do that. We have never had any failures by reason of excessive coking or excessive liquefaction in the ovens from the use of our own coal. Our own coal is a contracting coal and not an expanding coal. We never have any failure of any kind on that account.

By Mr. HAMMOND:

We produce coal tar and ammonia. (1301) That is sold. From a ton of coal we make about 25.5 pounds of ammonia, as ammonium sulphate; about nine gallons of tar, and about 6,000 feet of gas. We use all of that gas.

By Commissioner AITCHISON:

If the courts were to construe the act as prohibiting the assigned car practice, or Congress should prohibit it, we would proba-
2845 bly have to find some way to get along, as a makeshift, but not to run the plant successfully the way it should be run. We might have cases, as I stated, where we would get coal in the open market, and would be liable to get coal that would not coke and get some expanding coal out of which we could not make coke or could make a poor grade of coke, (1302) and that would make poor iron, and that would make poor steel, and we would have a lot of rejected steel products. We would try to overcome these difficulties. If we got some coal that was high in sulphur, and always had to get that kind, there would probably be some arrangement made for washing it. There are some exceptions where coke is washed for coking plants. (1303) Probably the first thing that would be done would be to try to buy some coal from some district much farther away from Youngstown, over which the freight rate would be a great deal more, and that would be coal that would be very good coking coal, and use that to sweeten up the poorer coal that we would get on account of the condition spoken of. If it was on our own properties, probably we would have to install a coal washer. We would have to, in all probability, use more coke and use more lime in producing our iron, and try to get by with the poorer coke, and make more costly pig iron. How much more costly would depend altogether on the amount of additional fuel and additional stone. That would be pretty hard to tell, because that would depend upon the operation of the furnace. (1304) I can not tell. I do not know. There are no two furnaces that run alike. Even two furnaces that are built from the same drawings will not run out the same. If we no longer had this privilege, we could not succeed as well or as economically as we can if we could get the coal. If you can get good coal from the mine, it is better. There is one thing about using

washed coal in a by-product plant. You get so much moisture
2846 in your ovens. That means a lot more liquor through your entire system. When you have coal high in moisture, in crushing the coal and preparing to charge it into the ovens, it takes up more volume, and you can not get as much into the ovens.

(1305) As to whether we could by the devices I have indicated make good pig iron and steel, I do not believe it would be as good as what we make now. I do not think I could say it would be as good as the kind they used to have, because the Connellsville beehive coke that was used everywhere (1306) was made from ideal coal. I do not believe that we could get enough beehive coke. Those particular grades of coal are being exhausted to a large extent. As to whether we would be obliged to shut down our plant, we might have to stop making some particular grades of material and let somebody else make them. Probably there might be some concerns that could get better coal; so situated that they could get their coal, or be close to some mine where they could get better coal. In such event, the manufacturer would naturally have to take to those places. There have been a good many times when we have been short of coal, and we have had to take any kind of stuff (1307) that we could get, and I suppose we would have to do the same thing if we did not have the assigned car privilege, but it would bring up the cost and it would make a poorer quality. We might have to use more storage. That is injurious to the coal. Possibly we might have to spread our orders more widely. As to whether an extra ten days' supply of coal could be carried, it could be done, but it is pretty hard to tell how coal will oxidize. Some coal oxidizes much more readily than others. Sometimes a coal pile will get so that it will have a kind of whitish or grayish color in a short time. As to increased storage this year, I believe we have a little more low volatile on hand. I do not know just why, but we have increased the storage none at all prac-
2847 tically. (1308) I don't know as I have given any particular consideration as to what would happen if we were to carry a large quantity of the kind of coal we need on hand and get it in times of car plenty. I know that our people have put coal on the ground once in a while, and I have always tried to advocate against it; not to keep anything more than is absolutely necessary. It brings up our cost and it actually makes a poorer grade of coke. You get more moisture in it also. If we no longer had the assigned car privilege, very likely we would have to buy better coal if we could get hold of it, and store it; that would increase our storage capacity. The effect would be somewhat increased cost and somewhat poorer grade of coke. The additional cost of the handling of the coal, if it was brought from a field farther away from our plants, would have to be passed to the cost of the material that is sold. I suppose it would have to be

passed on to the consumer. (1309) I do not have anything to do with prices.

Redirect examination by Mr. MANCHESTER:

The increase in storage of low volatile coal was due to the conditions incident to the anthracite situation. In the proper operation of a steel plant maximum tonnage is essential. It costs as much to run a blast furnace if you are making low production as if you are making maximum production. Anything that tends to reduce your tonnage will increase your cost. The overhead goes on anyway.

By Mr. PUTNAM:

Our company is in competition with steel plants in the Pittsburgh district that get their coal all water hauled. (1310)
2848 There are some plants that get coal by water to their by-product plants. The Jones & Laughlin Steel Company and some of the plants of the United States Steel Corporation do. We are in competition with some of those plants. They get some of the coal from the same district where our Nemacolin mines are located. There are some mines right across the river that load into barges and take it right down to the coke plants. Those mines run in times of car shortage.

By Mr. GUTHEIM: (1311)

The Nemacolin mine, as I understand, is only half of the capacity which our company want to get. They are perhaps getting half of what it will eventually produce. As to getting the coal that we wanted, if there is only a 50 per cent car supply, by having our mine developed to 200 per cent of our needs, that probably would help. I suppose we could also get that coal if we would buy 200 per cent of our needs, get more, and put it on the ground. We run primarily for the coke. A utility plant runs for gas. I have never operated a utility plant.

J. J. KERR (1315), called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. PUTNAM:

I am in the employ of the Picands-Mather Company at their Pittsburgh office and have been in the employ of that company since the first of May. I have prepared an exhibit showing the total production per day of bituminous coal throughout the United States, the percentage of coal car distribution, and the percentage of mines idle covering the period from August 12, 1922, to August 11, 1923. (1316)

(The statement referred to was received in evidence as Exhibit R-26.)

2849 The data from which the first chart line showing the production of bituminous coal per day during this period was made was secured from the official reports of the Geological Survey, Department of the Interior. The second chart showing the percent-

age of coal car distribution came from official reports of the American Railway Association. The data shown on the last chart, covering the percentage of mines idle, also came from the reports of the Geological Survey. (1317) This is the only period for which they had this information compiled. That information does not include wagon mines. The mines covered by the reports from which the latter curve is compiled were all coal companies reporting to them, practically all companies conducting large operations. Reading from page 1392 of the report of the Geological Survey entitled "Coal in 1918" (1318) there were 2,636 class four mines producing from 10,000 to 50,000 tons of coal per year, which constituted 23.9 per cent of the total mines in operation that year. They produced 11.7 per cent of the coal produced by all mines in that year. Of the fifth class mines producing less than 10,000 tons there were 5,454 mines with a percentage of 49.4, producing 2.2 per cent. Reading from the official report of the Geological Survey for 1920, (1319) the fourth class mines for the year 1919 were 2,784 with a percentage of 22.4, producing 15.3 per cent; fifth class mines, 7,040, with a percentage of 56.7, producing 3.1 per cent. For the year 1920 there were 3,160 mines, which constituted a percentage of 21.4, producing 14.4 per cent; 8,695 fifth class mines, 58.2 per cent, producing 2.8 per cent of the production. Reading from the same pages, for the year 1917 there were 2,566 mines in the State of Pennsylvania, producing 172,448,142 tons. In 1918 in Pennsylvania, 2,882 mines producing 178,550,741 net tons; (1320) in 1919, 3,377
2850 mines, producing 150,758,154 tons; 1920, 5,448 mines producing 170,607,847 tons. I believe these figures for all of these years include wagon mines, as distinguished from the last chart of my Exhibit No. R-25, which did not include wagon mines or mines of that class.

By Director BARTEL:

My understanding in drawing up this chart was that as the percentage of coal car distribution decreases, it showed an increase in the number of mines in operation, producing practically the same tonnage. (1323) The fourth and fifth class mines in 1918 makes a total of 73[.3] per cent of the total mines in operation during that year, and the fourth-class mines produce 11.7 per cent, and the fifth-class mines 2.2 per cent of the total tonnage.

By Mr. LIVERIGHT (1325):

As to whether the Geological Survey reports show the percentage of the production of the country that reported with reference to my third table on Exhibit R-25, I can not answer, nor can I as to what is the percentage of the country that reported with respect to my first table. (1326) I think 121 railroads are represented in my second table. I understand they are all the railroads that originate bituminous coal in this country.

ABNER LUNSFORD (1330), called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. LONGLEY:

I am vice president and general manager of the Fordson Coal Company. This company is a subsidiary of the Ford Motor Company and furnishes coal to that company. I also look after the furnishing of coal to all branch plants of the Ford Motor Company in the United States. I am in general charge of the
2851 supply of coal for the Ford interests. Through this subsidiary the Ford interests operate (1331) the Banner Fork mine, in Harlan County, Kentucky, on the Louisville & Nashville Railroad; the Pond Creek mines, on Pond Creek, in Pike County, Kentucky, on the Norfolk & Western; the Twin Branch mines, on the Norfolk & Western, in McDowell County, West Virginia; the Nettleburg mine, on the Chesapeake & Ohio, in Fayette County, West Virginia. Besides these we have 120,000 acres of undeveloped coal lands in Clay, Bell, and Leslie Counties, Kentucky. The mines I have mentioned are all developed properties. The capacity of the Banner Fork mine is approximately 3,000 tons per day; Pond Creek approximately 7,000 tons per year; the Twin Branch property approximately 1,600 tons per day; the Nettleburg property on New River, 500 tons per day. The Nettleburg and Twin Branch are low volatile mines and Pond Creek and Banner Fork are high volatile mines.

(1332) One of those mines, the Banner Fork, on the Louisville & Nashville Railroad, is on an assigned car basis. The others are still using system cars. The last rated capacity of the Banner Fork mine, when we were on system cars, was 62 cars per day for the two mines. As to the requirements of the Ford Motor Company and its various interests, from 2,400 to 2,500 tons daily, seven days per week, are required for the coke oven plant in Detroit. For steam and gas producing requirements at Highland Park and Rouge plant in Detroit, 1,500 to 1,600 tons daily are required. We also supply the Detroit, Toledo & Ironton Railroad Company under a contract with approximately five to six hundred tons of coal daily for their fuel consumption. We supply the branches (1333), where it is practicable to do so. There are 34 branches I think in the United States. We supply all of those branches that are within a radius where the freight rate is
2852 reasonable to those points. Where it is not reasonable we buy the coal in some field that is contiguous to our plants and furnish them from that field. The fuel requirements we are called upon to provide for the Ford interests total approximately from 4,200 to 4,500 tons per day. That includes this tonnage of approximately 500 to 600 tons per day to the D., T. & I. (1335) Of the total tonnage practically 3,000 tons per day come from the Banner Fork mine.

(1336) With the exception of from 500 to 600 tons, which goes to the Detroit, Toledo & Ironton Railroad, all of the coal from the Banner Fork mine is sent to the Ford Motor Company at Detroit. The rest of the mines now produce the full fuel requirements for the Ford interests. From our own mines we can only supply the branches that come within the proper freight rate district. For instance, we are supplying Indianapolis and Columbus, Cincinnati, and Hamilton from our stone mines. There is a small tonnage that moves to the nearby branches. (1337) There is a small tonnage that is produced commercially. It is not within the proper freight rate district. I would not say that any of the coal produced at the Banner Fork mine is used commercially. There is approximately 200 tons per day that is resold to employees of the Ford Motor Company only in Detriot. We also let the Ford Hospital at Detroit have practically 25 tons per day. Part of the coal sold to employees and to the Henry Ford Hospital is produced at other than the Banner Fork mine. Some of that is shipped from the Pond Creek mines in system owned cars. (1338) It is one of the policies of the Ford Motor Company to take the important necessities of life and resell them to the employees at practically cost. This applies not only to groceries and shoes and hats and drugs and commodities of that kind but also to coal and coke. This coal is sold
2853 practically on a cost basis and not competitively with other coal.

(1339) Prior to going upon an assigned car basis at Banner Fork, we had at the mine to which we run the privately owned cars, for the year 1922, approximately 50 per cent car supply. We operated about three days per week. The car supply for the last six months of 1922 was approximately 22 per cent. During the early part of 1922 the coal markets were bad. There was not a great demand for coal and we had for the months of January, February, and March, 1922, I would say approximately an 80 per cent car supply on the Louisville & Nashville Railroad system. Figuring on the entire year on a 50 per cent car supply (1340), it meant 50 per cent production and 50 per cent working time. In other words, the men only worked 50 per cent of the time. About 34,000 per month was the average tonnage at the Banner Fork mine. We went upon an assigned car basis at the Banner Fork mine February, 1923. Our production after February 1, 1923, was approximately 90 per cent, or about 70,000 tons per month. That is, we produced from that same mine over an average of 12 months last year, about 34,000 tons, and since going upon an assigned car basis in some months we produced 74,000, but on an average it has been about 70,000.

By Commissioner AITCHISON:

This is on the Harlan Division on the Louisville & Nashville. (1341) The Cumberland Valley division, Harlan branch. Several

times after the privately owned cars commenced to run to the mines we were notified by the Louisville & Nashville that they had sufficient system cars on their line to throw us in the class with all other shippers, and we were prorated like every other shipper on the line.

We just got our pro rata share. That was in June, 1923,
2854 that that circumstance came up. The last mine rating, when we were on system cars, was 62 cars. As I understand the assigned car rule on the Louisville & Nashville system, if we elected to go on privately-owned cars, we cut ourselves out of the distribution of system-owned cars, and if an excess of cars comes, they put them into our tipples and we load them as fast as we can. If there is a minimum or a shortage of our cars, we get no cars at all. As to the two periods contrasted, there was no change in our rating at all.

By Mr. LONGLEY:

As to whether that might have occurred a little earlier than June, it was along in the early part of the summer. I would not state positively it was in June, but that is my recollection.
2855 (1343) It was sometime in the early part of the summer. It was due to a shortage of transportation facilities and an excess of empties. The result of going on an assigned car basis was to insure us a steady and constant supply of coal. We had not had that before. The reason we went upon an assigned car basis was to get a steady supply of coal from the mine that we knew produced a good grade of by-product coke and a mine that we owned. An assigned car is a car that is billed directly to the mine by a railroad or a private car owner, loaded, and returned (1344) over the same route by which it was delivered. That is my understanding. As I understand it, if there are sufficient transportation facilities to handle all system cars to be distributed to the mines, then we are entitled to have all of our private cars distributed for our own loading.

By Commissioner AITCHISON:

That is provided the Louisville & Nashville wants to take them. I am talking about the L. & N. rules. This is a rule laid down by that railroad, as I understand it.

By Mr. LONGLEY:

What I am stating has been my experience (1345) with the privately owned cars. If the number of cars exceeds the distributive share we get 100 per cent. If the L. & N. do not have sufficient system cars to place at all of their own mines, but do have sufficient motive power, and our cars are on the system, we get them.

By Commissioner AITCHISON:

If we do not have sufficient private cars to equal the commercial distribution we get what private cars we have on the system and no

more. If that is 20 per cent we have to take that. We do not order any system cars in handling our privately owned cars. (1346)

We could not under the L. & N. rules.

2856 By Mr. NORTHCUTT (1348):

Under the practice on the L. & N., when a mine goes on the assigned car basis using its own cars, it is given those cars and those only.

By Mr. LONGLEY:

My experience has been that the cars have been assigned on that basis on the L. & N. (1349), and it has been the practice ever since we have been on an assigned car basis. In the event of a shortage in motive power or other transportation facilities, we go on the same basis as commercial mines, regardless of whether we have cars or not and regardless of whether the railroad has system cars or not.

(1350) That is, we receive a reduction proportionate to the amount of transportation facilities that are not available. The two principal advantages in operating upon an assigned car basis at the Banner Fork mine are reduced cost in production and satisfied labor. As to our experience prior to going upon an assigned car basis, in November, 1922, for instance, during the railroad strike and mine strike, we were only loading at this mine 15,600 tons of coal at a cost of approximately $4.12 per ton. In January we loaded approximately 26,000 tons of coal at a cost of approximately $3.06. In march, this year, 1923, the first month after we went on an assigned car basis (1351) we got practically 100 per cent. In other words, we loaded over 72,000 tons of coal at a cost of $1.93. There was a difference in cost of production at that mine before and after going on an assigned car basis, due to the lack of transportation facilities, between about a 21 or 22 per cent car supply with a cost of $4.12, and approximately 100 per cent car supply with a cost of $1.93. Efficient mining operations are absolutely dependent upon

2857 transportation facilities. As to the advantages from this change which are reflected in labor conditions, the mine, of course, operates in accordance with the car supply. If the car supply is 3 days a week (1352) the mine works 3 days per week, and it necessarily follows that the laborers, the miners, and helpers around the mine, only get 50 per cent as much wages as they would if they were working 100 per cent of the time. If our labor works on less than full time, it is aboslutely not satisfied and contented. It is not contented unless it does work full time. We do not get as good results as when we work 100 per cent of the time.

For instance, the Ford Motor Company has a system of investments. They permit any employee, large or small, to invest one-third of his wages back into the business of the company. There is a much higher percentage guaranteed on this investment than there is on the ordinary investment. At our Banner Fork mines I will say that there are approximately 50 per cent of the men who are

taking advantage of this apportunity. In other words, it is a method to get them to save. At our other plants, that have been on approximately 50 per cent basis, there are only about 15 per cent of those men that are taking advantage of this investment plan, and of that 15 per cent there is a large number of them who are salaried men and single men, while at our Banner Fork mine the majority of them are married men and men with families. (1353) At the other plants on a 50 per cent car supply it takes practically all they earn to keep their families as they should, so they have nothing to put by. The married man has not much chance on a 50 per cent car supply. As to whether priorities will take care of this situation and can be substituted for assigned cars, they cannot according to our experience.

By Commissioner AITCHISON:

As I understand it, a priority can only be issued by the commission. I would not say that if the commission should approve this rule it is a priority. (1354) If it is a priority we do not necessarily get 100 per cent. We do not get a hundred per cent unless
2858 there is an excess of motive power over system cars of the system. Take the Louisville & Nashville R. R. Company, for instance. That railroad is largely an originating road. I would say, on a rough guess, that 70 per cent of coal originating on the L. & N. goes off the system. This condition arises and has arisen in the past right often that a large percentage of the L. & N.'s own equipment—and I think they have about 34,000 open top cars for coal service—gets off their system onto connecting lines. On account of weather conditions sometimes in the winter, and other conditions which arise, they do not get back on their system a number of cars sufficient to balance up what they have shipped off their system. When that condition arises, if we own our own private cars and they have ample motive power and ample trackage to handle them, we get 100 per cent car supply. (1355) We are getting more coal proportionately under rules laid down by the L. & N. R. R. Co., and we think we are entitled to it under those rules. We did not make the rules. I do not say that what we get is a priority. I think it is a right we have.

By Mr. LONGLEY: (1357)

The additional tonnage we secure is due to equipment belonging to the shipper or consignee. It is a capital asset of the Ford Motor Company. (1358) This condition could arise, that the L. & N. might have 100 per cent of system cars on its system. We might have no cars on the system at all. Then we would get no coal, absolutely, because when we go on privately owned cars under the L. & N. rule we cut ourselves entirely out of system car distribution. If anything happens to us and we do not furnish our own cars we do not get any coal. There is a difference between this and a priority as issued in the coal shortage. We only had a priority of about

5 or 6 days last year in the extreme shortage and had to shu
2859 down for lack of coal. (1359) Priorit es did not permit th
securing of a particular grade of coal. I agree in genera
with the statements of the witnesses who have gone before in regar
to priorities. Mr. Rust and several other witnesses in their testimony
I th nk, covered that thoroughly. If the order of the commission o
June 15, 1923, were permitted to stand production at the Banne
Fork mine would be cut practically in half. The men would ear
practically one-half as much money as they have been earning.

By Mr. BROWN:

It might not be true right at the present time. I do not kno
what the car distribution is on the L. & N. at the present time becaus
we do not part cipate and have not since February.

By Mr. LONGLEY:

This is from my experience last year. As to whether we have eve
had 100 per cent car supply on the L. & N. before, we have had onl
for a month or two at a time. (1360) As to the effect of this orde
upon the value of the mining properties, I would say that a larg
producing mine like this, with a car supply of 100 per cent, i
worth 50 per cent more than it is with one of 50 per cent. Ther
would absolutely be a direct reduction in the value of the min
There are only two things that you might do to take the place o
this assigned-car regulation. That would be to buy additional mine
and sufficient mines, I would say, to furnish sufficient coal on a 5
per cent car basis. That would also mean investment in practicall
50 per cent more equipment and machinery than we have at th
present time at our mines. That would mean practically twice a
many men. They would work 50 per cent of the time. A mine ca
not work unless they have railroad cars. (1361) Of course, an
m ne can afford to pay better wages on a 100 per cent car suppl
than they can on a 50 per cent car supply, and the reverse is equall
true. A man working at a mine on a 50 per cent car suppl
2860 in theory ought to have more money than he does if he work
six days a week. The Ford Motor Company maintains
minimum wage scale and that wage scale is based on the costs o
production. When you put your mine on a 50 per cent basis you
wage cost of coal, of course, naturally goes up and it makes th
cost of that particular product in the plant, which is an absolut
necessity, h gher, of course, than it should be. (1363) We hav
never asked for any system cars since we have been on our assigne
cars because my understanding of the rule was that when we wer
on assigned cars we cut ourselves absolutely out of system-car dis
tribution. That was my understanding and that is the way we hav
operated. I was familiar with the operation of that mine befor
the Ford interests secured it. I sold it to them. (1364) The wag
scale before that time was about 25 per cent under the wage scal
that we are paying at the present time, being increased 25 per cen

after the Ford interests took it over. The wage scale for a long time was disproportionate. It was only proportionate on a 100 per cent car supply. It was necessary to reduce costs in order to secure a proportionate wage scale. We wanted to reduce costs and the only way we could figure it out was to put in assigned cars. That absolutely did it, according to the wage scale.

By Commissioner AITCHISON:

If assigned cars were put in at other mines down there it would enable them to do the same thing, namely, increase the wages of their miners.

By Mr. LONGLEY:

If we were denied the use of private cars as we have used them in the past it would materially (1365) increase the cost in such a way as to make the present wage scale disproportionate to the cost of what the coal ought to be.

2861 By Commissioner AITCHISON:

If the assigned car privilege were cut out we would not cut the wages. We would, of course, have to buy some coal elsewhere.

By Mr. LONGLEY: (1366)

In that particular district there are four mines that have assigned cars. One is the U. S. Coal & Coke Company, one the Wisconsin Steel Company, one is the Koppers By-Product people, and ourselves. Before we went on assigned cars I have often figured that but for the fact that these other mines had assigned cars our car supply would have been materially reduced because the number of empties the L. & N. did have on the system in times of car shortage were distributed to mines outside of the privately owned car mines. I have not any statistics as to the proportion the assigned car supply bears to the system cars available, but I would judge from 15 to 20 per cent.

Cross-examination by Mr. GREEVER:

Our mine is rated on the basis of capacity. It is not rated under assigned cars. It was rated up until the time we went on assigned cars. We had a rating that changed on the tenth of every month. If anything happened so that we could not load the tonnage it was based on the previous month's performance. (1367) That is a rule of rating on the L. & N.

By Mr. BOYD:

In explanation of what I have said we do not make our car reports just like we used to, but I did not know that they paid any particular attention to a rating on an assigned car mine. I do know this, that if a bunch of our cars happened to come in there, more than we could load, they would put them all into us and we

would load them as fast as we could, but we have to maintain an average at those mines to-day from 62 to 65 cars a day, the days we have cars.

2862 By Mr. GREEVER (1368):

If it be supposed that all of the mines on the L. & N. availed themselves of the privilege that we have exercised and purchased cars of their own, and if they had one certain point to ship it all to, it would be as near the millennium in the coal field as you could get. We would have 100 per cent production every day. That would imply and necessitate 100 per cent motive power, 100 per cent trackage facilities, and 100 per cent terminal facilities, and unless the railroad had all those facilities necessary to move all those cars every day both ways we would in our car distribution be put on a basis of car ownership instead of capacity. As to whether the railroad could operate under such a condition, (1369) I am not a railroad man. I could not tell. As to whether there would be such a congestion of cars and of distribution among all the operators that it would be an impossible proposition, I cannot see it that way, provided every mine's coal was going to one central point. You could not take the coal from all the privately owned coal mines in the Harlan field for a day or a month and ship it to one point. I am qualifying my answer by stating that if all coal went to one central point that would be as nearly perfect as you could get a coal field. I know it does not all go to one point and never will. The operators in general are engaged in commercial business. Somebody else has to have coal besides the Ford Motor Company. (1370) If every mine would buy its own cars, they would own their own cars, and if they were going to ship them discriminately I do not see why they could not handle them as well then as they do now. Privately owned cars, in other words, would then take the place of system owned cars. As to what the L. & N. would do if a trainload of empties were delivered to it that had been filled with coal in the general commercial business, 100 cars in a train to be distributed to 50 owners, I

2863 could not tell you. I am not a railroad man. I don't know that it is an impossible proposition. I never worked on a railroad in my life. I have used the railroad facilities all my life. If a railroad started out with a train of 100 cars, that cannot be shuffled off, just any car to any mine, like system cars, but have to be picked out and drilled out, so that every operator would be given his own car, (1371) the situation would not be any more impossible than you have now.

By Director BARTEL:

I cannot conceive every mine operating 100 per cent every day of the year. That has not been my experience for three years. In explanation I will say that for 15 years I was on the N. & W. R. R. at Tom's Creek, Va., and during the 15 years that I operated that

plant we loaded from a million and a quarter to a million and a half tons of coal a year; we loaded from 125,000 to 150,000 tons of coal a month, and I will say that in the 15 years we did not lose 30 days on cars.

By Mr. GREEVER:

There were all system cars. As to whether the solution of this whole problem is for the railroads to furnish cars, of course that is the solution, but if they do not furnish them we will have to furnish them until they can do it. The N. & W. has furnished them in times past during the 15 years I was there. (1372) The Ford Motor Company has no privately owned cars on the N. & W. As to whether it has entered into any negotiations to place them there, that is with the traffic department, not with me; I don't know anything about the negotiations.

By Mr. LONGLEY (1373):

As I understand, a strike was called last year, and the N. & W. this year, for instance, up until September 1, the first 8 months, have given us practically 50 per cent car supply.

2864 By Mr. GREEVER (1374):

I thoroughly understand that the N. & W. has had serious trouble ever since the shopmen's strike in its motive power. Up to that period the N. & W.'s record is absolutely the best in the world so far as cars are concerned. We have not shut down any of our mines on the N. & W. They are all running.

By Mr. ROPIEQUET:

I was actively engaged in this field before I represented the Ford people. I went to this field in 1917, to the Banner Fork mine. I am very well acquainted with the general situation in that field. There are difficulties of transportation in the field. We always had our difficulties, besides the question of cars. They had labor troubles. (1375) As to the character of the trackage in that field, they have a single track, I think, from Harlan to Corbin. I don't know whether the single track runs beyond Corbin or not. As to whether in the time that I was there I ever had any difficulty in the operation of the mine because of difficulty in transportation facilities other than cars—that is, tracks or lack of engine power or congestion at the terminals and connections—ever now and then the car distributor would tell us that there was a congestion and they would have to clean the congestion up before they could give us any more cars. That happened right often.

By Commissioner AITCHISON:

A year ago the situation as to motive power on the L. & N. was so serious that we wanted to send our own locomotives and crews down there.

By Mr. ROPIEQUET:

I think the wage scale the Ford Company is paying at this mine is a little higher than the wage scale generally prevalent for
2865 that service. (1376) Wages have been adjusted since Mr. Ford bought this mine in 1920. When they put what was known as the Ford scale in there, it made about a 25 per cent advance all the way around. We don't change our scales with the other people. We have our own scales and adhere to them. When the car supply was prorated and we did not have assigned cars, we met the scale all right, but it made our coal cost us excessively. I could not say whether our competitors in the same neighborhood could have paid the same scale and met the market conditions in marketing their coal at that time. It depends on what they were getting for the coal. (1377) Generally speaking, up to four or five years ago they could. With the market now, I don't know whether they could or not.

By Mr. BROWDER:

As to whether they are operating now at all, I don't think they are. I think my neighbor right next to me there is operating on slow time.

By Mr. ROPIEQUET:

We increased our monthly output from about 34,000 tons to 70,000 tons on the average through the use of the assigned car. Our neighbor who did not have assigned cars could not increase the output. He did not get cars as often as I did. Our increase was absolutely due to the assigned car. We wanted the coal from the Banner Fork mine and (1378) wanted it in sufficient quantities at our coke ovens, and that was the solution, in getting sufficient coal from our Banner Creek property, to give us our proportion of that quality of coal at the coke oven. As to whether if the irregularity continued at our mine, which was necessitated by the lack of car supply, it would create a labor discontent there which would not be helpful in the operation of the mine, that necessarily follows. I suppose our experience is the same there as every other operator's experience
2866 is along that line. (1379) The cost of the Ford products, of course, is largely responsible for the reasonable price at which they are put on the market. We are not the only people in the United States, of course, that own mines, but under the assigned car ruling of the Louisville & Nashville Railroad we see no reason why we should not take advantage of privately owned cars. (1380) We did not do it until this year. We ran from 1920 until February of this year before putting on assigned cars.

By Commissioner ATTCHISON:

It is absolutely cheaper for us to mine coal with assigned cars than without. The benefit goes in the price to the consumer of the Ford products. As to whether we raise the wages also of our miners,

we adjust wages, every now and then. We have had no general raise of wages since August, 1920.

By Mr. ROPIEQUET: (1381)

Our men at the mine are permitted under the Ford plan to invest back into the Ford Motor Company business one-third of what they earn, be it great or small. That carries a guaranteed dividend return. About 50 per cent of the employes at the Banner Fork mine have availed themselves of that privilege. There is a part ownership by at least 50 per cent of them at that mine. As to whether the wages they receive is higher than that paid in the same neighborhood of other mines not having assigned cars, I don't know what the wage scale is in that field. These part owners are entitled to a part of the profit which results from the use of the assigned car. (1382) There is no reason why another mine should not give their employes part ownership in the mine if they want them to have it. (1383) I stated as one of the reasons why the assigned cars was proper that we were able to give our men an additional wage, satisfying them better, and in addition to that were able to give them a chance to earn additional dividends out of the profits of the 2867 company. There have been times since 1920, as every coal operator knows, when coal sold at an abnormal profit. Over a period of years I think you will find (1384) that even on our wage scale, coal has sold at a sufficient price to pay labor the same scale we are paying them to-day.

As to coal selling at abnormal profits, that is accentuated by the fact that there is an extreme shortage of cars. As to whether that extreme shortage of system cars is accentuated by the fact that the assigned car mines receive a full supply while the other receive possibly 22 per cent, my answer is "yes," but when I was on a commercial mine basis and the United States Coal & Coke Company came into our field and put in a plant there to load 125 cars a day, I shook hands with myself when they put their own cars in there because I figured that they went out of the distribution and did not participate in the cars that were being sent into that field. As to whether that was because of the theory that the carrier would not supply us with a sufficiency of cars, I knew that it would add that many more cars to the total available car equipment for that field. (1385) I did not figure that the placement regularly of those cars would require of the transportation facilities of the carrier so much as to render it less probable that we would get the cars which the carrier had for distribution among the commercial mines, because the L. & N. rule was that if they did not have sufficient motive power to place up all the system cars on their system, the privately owned car mines did not participate over and above what the other commercial mines were getting. Our theory is that no equipment will be used that interferes with the commercial distribution and that no cars will be placed at our mines excepting our own cars, unless there is an excess of motive power and a shortage

of system cars. (1386) I stated that we did not get any cars
2868 except our own cars. When we put our privately owned cars on, we cut ourselves entirely out of the distribution of L. & N. system cars. (1388) I do not know a thing in the world about the coking plant. All I do is to furnish coal to them.

By Mr. BROWN:

We have 800 private cars in service now to the mines. I don't know just when they were bought. They were bought in Detroit and were not delivered until 1923. They commenced to go into service, I think, in February, and by March we had practically the entire number of them. These 800 cars give us an average of 60 cars per day, or about 3,000 tons a day. They shuttle back and forth from our Detroit property to this mine. They run over our own railroad from Toledo to Detroit. (1390) The Louisville & Nashville turns them over to the Big Four in Cincinnati, and then the Big Four takes them to Toledo. I sold this mine down there in Kentucky to the Ford people. As to why I didn't have some private cars when I was operating, I didn't have money enough to buy them.

By Commissioner AITCHISON:

Our cars move back to the mines empty. Occasionally there will be a load of something coming back in one of them, but, generally speaking, they all move empty back to the mines, in a direct route. (1391) As to whether, for example, the commission found that the Louisville & Nashville and the Big Four had more cars than might be economically advisable and should want to move some of them to another line of railroad, I would expect the commission to be able to do that with our own cars, my answer is "no." (1392) As to whether we would have the further advantage that our car supply would be kept absolutely intact, I don't think so. I think that the Ford Motor Company, in a case as severe as that would be, would be willing to go fifty-fifty with you on anything that would help to relieve the situation. We are carrying at the
2869 present time stocks for approximately 75 days. If suddenly anything should happen now to slow down transportation with that much stock coal on hand, I am very sure that the Ford Motor Company would allow you to handle their cars and fuel anywhere you wanted to handle it, for hospitals or such things, if you liked, and there were not system cars sufficient.

By Mr. BOYD:

I think the distance from our mines to Detroit is 510 miles. We have two mines at Banner Fork, No. 1 and No. 2. (1393) We owned 1,004 private cars up until a few days ago. I don't know just what day they were turned over to the Detroit, Toledo & Ironton Railroad. I do not know anything about the arrangement under which that was done. We have now reduced the number of our private cars to 800. We are making those give us approximately

100 per cent car supply when the Louisville & Nashville can handle them. I judge the average turn-around on our privately owned cars from the mines to Detroit and back is on an average about 18 or 20 days. I operated both of these mines before they were sold to the Fordson Coal Company. I am familiar with the local surroundings. As to companies operating mines adjoining ours (1394), there are the Creech Coal Company; the Kentucky-King Coal Company, which, I understand, is owned by the Consumers Power Company, a public utility; and the White Star Coal Company, which is mining in the same mountain but loading its coal five or six miles from us. Its property adjoins ours. The White Star Coal Company, I understand, is owned by the Detroit City Gas Company, a public utility, operating coke ovens and gas plants. (1395) As to spotting of coal cars at these mines, I know they have always got the same car supply we did before we put on privately owned cars. I am not familiar with what the car supply was after we went on the assigned-car basis, because when we went on the assigned cars we cut ourselves out of the distribution of system-owned cars. Our neighbors operate on system cars. As to the number of cars ordered at our Fordson Coal Company No. 1 and No. 2 mines, in April, 1923, I am not at the mines but about once a month, or sometimes once in six weeks. (1396) If cars were ordered in excess of the rating I was not aware of it. I can not state just what the car rating was of those two mines during that month. As I understand it, when you get assigned cars you get all in the system. If they get in a bunch, they place them there and we load them as fast as we can. They do not keep us right down to the rating on privately owned cars. As to our car supply in May, I know we ran practically 100 per cent of the time. (1397) I think in June or July we shut down one plant. We had been trying to repair it for two years. I don't remember the supply of our mines in July. We got all we could. In September, I think the supply was about 90 per cent. We received this car supply by the use of 1,004 cars which we had then in service. (1398) I think they turned 200 of them over to the Detroit, Toledo & Ironton. With 800 cars we expect still to maintain practically 100 per cent car supply at our mines.

2870

By Mr. HAMMOND:

By reason of owning assigned cars or private cars, we have been enabled to maintain a better and more efficient labor supply. As to the effect of our mine upon a neighboring mine, if my property was such as yours, right across the mountain there, in a car shortage the Interstate Commerce Commission will give you priority orders and see that you get your coal. With us they will not. That was done last year. As to the car supply of the White Star Coal Company for the nine months ending March 31, 1923, that was an abnormal time everywhere I suppose. I do not not know what the car supply was. (1299) I know the supply we had from July 1 to December

1 was 21 per cent. We worked one day over—one day a week
2871 from July up to December 31st. That was before we had assigned cars. As to whether the operation of our mine daily adjoining that of another mine which did not operate would tend to dissatisfy the labor at the other place, that is the other man's trouble. (1400) As to the Kentucky-King mine and the White Star Coal Company mine adjoining ours, I don't know whether they have privately owned cars or not but I do know that when they get into a car shortage they can come before the Interstate Commerce Commission and get priority orders where we are not entitled to do it.

By Commissioner AITCHISON:

The Detroit City Gas Company is what I had in mind, for instance.

By Mr. HAMMOND:

We are working practically 100 per cent at Banner Fork mine which adjoins the White Star mine and shipping our coal to Detroit. The White Star Coal Company ships its coal to its sister subsidiary, the Detroit City Gas Company, at Detroit.

By Mr. BOYD (1401):

It is a correct statement that the coal handled in privately owned cars is handled usually in train lots with lesser cost to the carrier and a consequent decrease in transit time.

By Mr. GREEVER (1402):

I spoke of having received at times more than 100 per cent supply of cars, that is, they put on our tracks all they had. I also said that we were only entitled to our proportional part of the motive power and facilities generally, trackage and terminals. The Louisville & Nashville Railroad Company determines that question.

By Mr. BROWDER:

If during a car shortage—not during a transportation shortage—our private cars had not been in operation, I can not figure that these adjoining mines would have worked as many days. When I was on the system-car basis, three of my neighbors had privately owned cars. I always figured that I got a better car supply with their cars than I would have gotten had those cars been cut off.

2872 By Mr. CURRY (1403):

There were four companies on this division of the Louisville & Nashville which used private cars. Banner Fork mines 1 and 2 we figure as one operation. The Lynch mine is the name of the mine of the United States Coal & Coke Company. Benham is the name of the mine of the Wisconsin Steel Company, and Coxton and Kayu are the mines of the by-product company, the Melcroft Coal Company. (1404) The rule concerning shortage of motive power was carried out with us during June or July, 1923. I think the Louisville & Nashville had more system cars

or had as many system empties on the line as they could handle with the locomotives that they had, so they put us on the same pro rata share as the balance of them, according to the way I understood it. We used our own cars, but they only gave them to us in the same proportion that they gave everybody else system cars. (1405) They had sufficient empties, but not sufficient motive power, and we went on the same basis as everybody else. That extended perhaps a week. I would not say positively. It was a short length of time. As to whether that rule with regard to shortage of motive power was put into effect at any time with respect to these other mines having private cars, I suppose it was, because I think all the private-car owners are under the same rule on the Louisville & Nashville. I do not know whether any of the others have used any system cars or not. As to whether following the shopmen's strike about a year ago, the United States Steel Company's mine and the mine of the Wisconsin Steel Company, for example, were put on a pro rata basis, I can not state positively as to that, but my understanding was that they were put on a pro rata basis with everybody else on the system. I know that the Louisville & Nashville announced that there was a motive-power shortage during the fall of 1922. (1406) As to when that motive-power shortage as distinguished from a car shortage ended, it isn't quite ended yet, I don't think. I think the Louisville &
2873 Nashville has at the present time sufficient motive power to haul all of the cars on this market. As far as I know, the rule of the Louisville & Nashville has been invoked only with respect to shortage of motive power. As to congestion at terminals or limited track facilities, I would think that that would be shortage of motive power.

Redirect examination by Mr. LONGLEY:

Under the present existing conditions, and under conditions which we have experienced at the Banner Fork mine during our operation of it, that mine can not be economically operated without assigned cars. (1407) We are not getting any more from the railroad than anyone else who applies. We have no preferential treatment in any shape or form.

T. F. GEHLE, called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. LONGLEY:

In my position with the Ford Motor Company, in a general way, my duties cover the superintendence of production at the River Rouge plant. Among other duties I have the responsibility of securing the proper and adequate supply of materials for the coke-oven and blast-furnace operations, including in general the supplying of coal for the Detroit plants. At the Rouge plant there are a coke oven, two blast furnaces, a foundry, body plant, and glass plant we are operating now. (1408) There are others under

construction. We use there a total of from 4,000 to 4,200 tons a day. In the coke oven we use 2,400 to 2,500 tons a day. For steam and gas producer purposes we use from 1,400 to 1,600 tons a day. There is no other tonnage there that is used. At the coke ovens we produce a thousand tons of coke a day for the blast furnaces, 300 tons a day for the foundry, between 275 and 300 tons a day
2874 for the employes, small size, and about 75 tons of pea coke and breeze. Other by-products from the coke ovens are gas, tar, benzol, and ammonium sulphate. (1409) We produce 24,000,000 feet of gas a day, about 15,000 gallons a day of tar, 3,900 gallons a day of benzol, and 54,000 pounds a day of ammonium sulphate. About ten and one-half million cubic feet of gas are used for heating the coke ovens. About 5,800,000 feet daily are used at the Rouge plant, that is, used in the glass plant and the core ovens in the foundry for heat treating purposes. The Highland Park plant uses about 5,060,000 feet daily. That is used for heat treating largely and enameling ovens. We also send approximately two and one-half million a day to the Detroit City Gas Company to be used by consumers of the city of Detroit. We require the coal for the continued uninterrupted operation of our coke ovens. The ovens are constructed to operate every hour in the year. Mr. Rust's testimony as to the general results in effect by not having this regular, adequate supply of coal is substantially the case with us. (1410) We can not discontinue the ovens and run them intermittently without very serious damage to the ovens. I heard Mr. Rust's testimony in full. I entirely agree with him as to the necessity of the operation of the coke ovens as he stated it was necessary to operate them. He covered it very thoroughly. And I also agree with his statement in regard to the necessity for a constant, uninterrupted supply of coal. We have 120 ovens with by-product recovery equipment. (1411) We have blast furnaces that are dependent upon coke from the coke ovens; also the foundry. We have power plants that are dependent on coal for steam purposes; gas producers for gas purposes that are not furnished by the ovens. As to the capacity of our blast furnaces, there are two of them on the high silicon foundry iron. They will average about 500 tons a day. The capacity of our glass plant is equal to about 15,000,000 square feet a year. We have also
2875 the foundry which produces 2,000 tons of castings daily and has the reputation of being the largest foundry in the world. The lack of uniformity in quality in a coke oven gives you low-grade coke. Low-grade coke carried on to the blast furnaces gives you off-iron. By "off-iron" I mean it does not come up to specifications. Off-iron carried on to the foundry produces castings which are poor quality, runs up your scrap loss in the foundry. Also it directly increases the machining cost of the castings, because the scrap runs higher as the castings follow through the machining process. The experience we have had, to bear this out, (1412) was most serious and always during car shortages. It decidedly means increased cost.

As to having a poor grade of coal followed through the processes and indicate itself in the final materials, that is applicable in the same way to foundry work. While we are not making any steel, our iron at the present time is going into the foundry. The strength and wearing qualities of castings are seriously affected by low-grade coal used in the blast furnace and in the foundry. Our scrap loss on the castings has been reduced from 10 per cent or more to three per cent and less. I believe this reduction in loss is due to our having secured a constant, uninterrupted supply of uniform grade of coal for our coke oven. This was secured through the use of assigned cars. We have established a record in the foundry for scrap loss in the past 90 days. It has been coming down gradually and as we get our coke ovens adjusted and our blast furnaces and our foundry adjusted to the uniform fuel (1413), the scrap loss comes down. That was due not only to a constant, uninterrupted supply but uniformity in the grade of coal. I would say that it was absolutely necessary in economically running our manufacturing process there. The coke ovens were started in October, 1919.

2876 At various times since starting, for possibly three or four prolonged periods, we have had difficulty in securing our coal supply. I might mention that in the winter of 1919 and 1920, the summer of 1920 and the summer, fall, and winter of 1922, that was particularly noticeable. Last year we were compelled to go on a 72-hour coking time. Our normal coking time is 20 hours. Some ovens run as low as 18 and we have done that sometimes, but we get the best coke at 20 hours. When you push the ovens once in 72 hours instead of pushing them once in 20 hours, you reduce the temperature of the ovens greatly.

2877 (1414) In reducing the temperature—of the damage which Mr. Rust described that is common to the high-silica brick occurred to many of our ovens. We had many of our ovens to repair as a result of this damage. That is more than a usual extension of the coking time. It is practically what 20 hours is to 72 hours. The plant closed down for three or four days. After we went down to a 72-hour coking time, we could not go any further without absolutely abandoning our ovens. The ovens were actually damaged and we had to repair most of them. Before going on the assigned-car basis, we bought on the open market as best we could. We had a man that we felt was an able coal buyer and knew the coal fields, and was familiar with our requirements. It was impossible to secure uniformity. If we contracted (1415) very often, the mine would not get cars. If the price of spot-market coal went above the contract price placed on our contracts, the deliveries on our contracts usually slowed up and the spot market, in many cases, was given preference by the coal operators. It was impossible to successfully secure either an adequate supply or uniformity in grade that is required at a coke oven. To remedy this situation, the first step in July, 1920, was that we bought the Banner Fork mine. Since then we have purchased

other mines; in all, about 10,000 acres of developed mine property and 120,000 acres of undeveloped mine property. Great care was used in the selection of the mines to meet our particular requirements. We tested many coals before purchasing the mines that we bought. We did not test them in a small way. We got enough coal to put through our ovens to give us operation of the blast furnaces and in the foundry, and we checked the results of the castings and watched it carefully all the way through from an operating standpoint and from a chemical analysis standpoint and any damage that
2878 might be done to the ovens. [We checked] the by-products secured and [made] a complete, careful study before buying the mines. (1416) I would not say that this successfully remedied the situation. When we could get coal from the mines we got along nicely, but on account of not being able to get it continuously it gave us an interrupted supply and did not give us uniformity in operation. The mine had the grade of coal, but it was because of transportation difficulties that we could not secure the constant, uninterrupted supply of this coal. I understood it to be transportation difficulties on the Louisville & Nashville Railroad. I do not know what those difficulties were. I know the car supply was unsatisfactory and undependable. Even after we bought the mines it was necessary to go into the open market for the purchase of coal on the spot market; entirely too often to have a uniformity of product. Trouble still existed in the use of that coal and the costs were extremely high (1417) and decidedly uneconomical. This continued until March, 1923, on the high-volatile coal and until September on the low-volatile coal. As to the reason for the change in March, 1923, the placing of the Banner Fork mine on the assigned-car basis gave us ample coal to operate our plants and enabled us to build up a reserve for the first time since we have had the ovens, of a high-quality coking coal. The conclusion was reached that the purchase of our own coal-car equipment was the only method available to secure us a continued uninterrupted flow of coal. We had bought the mines, and that assured us the quality. The cars, under the existing rules of the Interstate Commerce Commission, secured us adequate transportation facilities. We could devise no other economical means of meeting the situation. We were not at all disposed to purchase car equipment, as it necessitated a great expenditure of money and required additional care on our part to take care of these cars, which, we felt, was a railroad duty. They were purchased as a necessity, and absolutely essential for our
2879 production. (1418) It was an insurance against great loss and damage to us in times of car shortage and created great economical saving in operation of the mines and our production at the Detroit plants. If we were compelled to give up the use of our private cars at the Banner Fork mine we would have to depend upon a much reduced car supply and upon outside purchases. We will be compelled to go back to the old method which directly raises

our costs of all operations upon which coal is dependent. We had an instance of this kind at the Twin Branch mine, in McDowell County, West Virginia. That mine is able to produce all of the low-volatile coal that we require. For the reason of not having full car supply this year we have been forced to go on the market and buy low-volatile coal, the mine operating approximately half time. I has operated less than that this year. The cost of that coal is high, higher than it would be if we had the privilege of assigned cars on the Norfolk & Western. It is certainly very uneconomical. (1419) Our present requirements of low-volatile coal could be secured from this mine if we were on the assigned-car basis. The production is larged enough. I understand the mine is developed. As to whether by reason of lack of transportation facilities it is impossible to properly economically operate that mine my answer is "yes." As to the effect of operating the Banner Fork mine on the assigned car basis the mine has been able to operate steadily. The cost of the coal is reduced. The cost of the coke is reduced. The cost of the pig iron is reduced. The cost of the castings is reduced. (1420) I do not believe that we would need assigned cars if we always had 100 per cent system cars available at the mines, and we could bank on that condition. It has not existed with any of the mines that we ha. had for three or four years. Our experience in securing the other coal require-
2880 ments, aside from the coke-oven requirements, has been exactly the same, only that our conditions are more flexible, for the reason that we can use greater varieties of coal for steam and gas producer purposes. However, a good grade of coal has decided advantages in the steam and gas producer plants. This subject has been covered by previous witnesses, particularly the electrical companies, I believe, by Mr. Farrand. Our experience is practically the same. There is a positive necessity to have high-grade coal, with small amount of ash, with as little sulphur as possible, high melting quantity ash, since with a good grade of coal, as described, your cost of power is reduced directly. (1421) Last year during the coal shortage we were forced to buy some coal that had high sulphur content, higher than we ordinarily store or accept. That is for steam purposes strictly. It had only been in the bins a short time, and it caught on fire and we were a year fighting that fire. A lot of the coal was coked, and its efficiency was greatly reduced. Some of it was burned to ash. I certainly would not want to go through an experience of that kind again if I could avoid it. We also bought 800 carloads of fuel oil at the time the plant started up again to help us get started and used what coal we could get for the coke oven. This fuel oil was used for steam purposes at the Highland Park plant and also at the Rouge plant. We had to go to a lot of trouble in storing the oil, handling it. We were not equipped to carry such a large volume. We have to pipe up our boilers. It required a lot of help all

through, and our power costs increased greatly. We were shut down for three or four days before getting this fuel oil. (1422) This was last year, October or November. This threw out of work at that time about 85,000 men. If that would happen at this particular moment, it would throw out of work from
2881 100,000 upward. I have heard Mr. Rust testify in regard to the by-product coking-oven plant operations and its dependence on a steady uninterrupted flow of coal of a uniform grade, and my ideas are in accord with his ideas on the subject. I further agree with all of the statements (1423) in regard to the handling of such coal, particularly in reference to the stocking. You can not make good coke out of straight stock coal, even if it has been in the bin 60 days. You always have to have fresh coal to add to it. The more fresh coal you get, the better your recovery is, the higher your percentage of by-products and the better your grade of coke. We use a high grade of coke in the blast furnaces. It is very essential in the operation of the blast furnaces. Coke is the source of energy for the furnace reactions and its volume exceeds that of all other materials charged. By "volume" I mean in cubic contents. Therefore chemically and physically it is the controlling factor in operating. After working out a coal mixture and a coke-oven and blast-furnace procedure, any changes made mean readjustments until satisfactory conditions are again obtained. These are very delicate readjustments. Mr. Rust stated particularly from a coke-oven operating standpoint, but where you have a coke oven, a blast furnace, and a foundry joined, you have to make three adjustments really (1424) where he had one to make. Such items as variation in ash, sulphur, or moisture content of the coal are immediately reflected at the furnaces, due to the variations that follow in the coke. After the proper amount of flux has been determined to take care of a given ash and sulphur content and a proper slag composition obtained, any change in the coke composition, means working out new amounts of limestone, and higher or lower temperatures in the blast. In the meantime, the iron made, does not contain the silicon desired, and does contain many times more sulphur than can be taken
2882 care of at the foundry. Silicon in the foundry or in iron runs higher than it does in the basic irons for steel. It is far more difficult to produce continuously in one furnace. Silicon is the strength in the casting. It does contain more sulphur than can be taken care of at the foundry. This means unloading the pig iron from cars and reloading from the stock pile instead of sending the iron direct from the furnaces to the foundry. When the blast furnace is producing the kind of iron that the foundry requires, we send it direct, and when you get off-iron, or iron of such variety that you can not send it direct to the foundry, it means putting it on the ground and hoping to God you will be able to use it some time. (1425) Our transfer from the furnaces to the foundry is a thousand tons per day, costing $500 per day when it is necessary to unload and reload. While the above troubles cost

money and cause delay, they are small compared with those resulting from physical variations in the coke, caused by coals of various volatile content and unknown coking properties getting into the mixture. In the making of various grades of iron as classified by the silicon content, there exists a fixed speed of travel for the materials from the top of the furnace to the hearth or smelting zone. This speed or interval of preparation is greater for low silicon iron than for high, and when making any grade, the correct coke is one which does not burn up entirely before its charge reaches the smelting zone, neither does it burn long after its corresponding charge has passed the smelting zone. In other words, the combustibility of the coke must be correct for the speed at which the furnace is traveling. The fast-burning cokes are made from the high volatile coals, and when the volatile matter exceeds 30 per cent, the coke is of open structure, finger-like, friable, and worthless in a large blast furnace. When the volatile matter drops below 30 per cent, the coke becomes hard and dense
2883 and will not burn fast enough to keep a furnace traveling,
(1426) the result being loss of product and a hanging and slipping furnace. There was a time when we could not get the proper mixing of coal to give it the right volatile content in the oven, and we had to use a mixture of coals which ran the volatile higher than we knew to be good practice, but there was nothing else for us to do. We had a terrible time with the furnace in using that coal. While the variations in chemical and physical properties of coals as they affect coke can be checked to some extent by sampling every car containing different coals, and the delays, rejections, and traffic congestion charged to the product, there is nothing that can be done when inferior coals, especially of high volatile and sulphur content and poor coking qualities, are stored in stock piles. Not only is there a loss of life or coking quality, but the sulphur results in spontaneous combustion, the pile becomes partly coked before it is charged to the ovens. The coke as made from such coals is unfit to use in a blast furnace. Part of it blows out of the furnace top, part of it burns, and the rest plugs the furnace stock column, resulting in high pressure, scaffolds, slips, chilled hearths, and off-iron. We have experienced all of the above difficulties (1427) and have seen our coke rate per ton of iron ore rise from 2,000 pounds to 2,300 pounds, and even higher. A coke increase of 100 pounds per ton of iron adds to the cost 50 cents per ton, and it takes only a few irregularities to increase the rate 200 pounds. This is a loss of $15,000 per furnace per month for coke, not including loss of product and the increased load on railroad-yard service, the sum of which equals or exceeds the above. From an operating standpoint, all things considered, there is no item that can so easily get out of hand and beyond the control of the operator
2884 as inferior coke, and one sure way is cats and dogs of coal purchased from a variety of mines. That covers the diffi-

culties and experience in the blast furnaces since we have started The Ford Motor Company build coke ovens principally because w had blast furnaces and a foundry that would use all of the coke w could make, and we were unable to secure a quality of coke that ou product required in the Detroit district. We required a highe quality than we could secure. The coke that we bought was not o a high quality. (1428) After we got into our own operation w had a high-quality coke only after receiving a uniform supply o coal. We did have a high quality of coke for short periods when w could get proper coal. It is obvious that you do not have to stock as much coal with the assigned cars as you would without them Mr. Rust covered that subject quite thoroughly, and I agree with him in every particular. I am familiar with the cost of production of articles manufactured by the Ford Motor Company. I make it a point to be in constant touch with the products manufactured at the River Rouge plant and the costs. There are other products, of the plant besides coke and pig iron. We make 6,000 bodies per day—all the farm tractors, all the gray-iron castings—for all the trucks, the tractors, and the Lincoln. To keep familiar with the costs is part of my duties. (1429) I am familiar with the sale prices of the Ford products. It is the policy of the Ford Motor Company to establish the selling prices of its products as close as possible to the cost, and then create a profit by economy and saving in the purchase of materials and in reduced manufacturing costs. This has been done a number
2885 of times. Every possible economy was exercised, particularly in the purchase of materials and reduction of the factory costs. Instructions are given to that effect. As to the reduction in cost through saving at the Banner Fork mine, on a volume production that our company has, a fraction of one cent on one piece is worth a lot of time, study, and effort to secure. (1430) I would estimate that the saving in cost since going on the assigned-car basis is better than one dollar per unit, spread on the automobiles, trucks, and tractors. I consider that a considerable saving. While one dollar per unit is a figure that is a general estimate, if an actual study was made by our cost department, going through the history of increased costs in the coke ovens, the cost of coke, the cost of repairs in the blast furnaces, reduced production, off-iron, increased cost of iron, and also a study of the foundry as to the scrap loss, that could be traceable to not having an adequate supply of a uniform quality of coke as we have had in the past few months, that one dollar estimate that I have given could be multiplied several times. The profit or selling price of the Ford products is directly dependent upon these economies, including the saving from operation of the Banner Fork mine on the assigned-car basis. I am generally familiar with the wage scales in and about the Detroit district. (1431) I would say that the Ford wage scale is possibly 25 per cent or more higher than the average employer in the Detroit district. The selling price of our products has been reduced on the

basis of the existing wage scale. In order to properly proportion the wage scale to the selling price, in the event these economies are impossible, it makes it necessary to raise the selling price or reduce the wages paid. As the policy of the company requires
2886 its workmen to have comfortable living conditions and requisite income to take care of their needs and living requirements which, of course, cover some of life's luxuries, it is necessary that the wage scale be not reduced. The other alternative of raising the sale price of the product is therefore left. The public, of course, is interested in that. What applies to our organization will also be applicable to our suppliers, particularly the big steel companies and such dealers and suppliers as are large consumers of coal. (1432) The Ford Motor Company has over 100,000 employees in the Detroit district. I can safely say that is from one-third to one-half of the total labor supply in that neighborhood, covering practically Wayne County. There is a large number of employers, these other companies, directly dependent upon the organization of the Ford Motor Company. It is obvious that a shut-down of Ford interests creates a serious consequence to the community. It would be impossible to state its seriousness. The probabilities are that if it were closed for any extended period of time, and those men were compelled to seek employment elsewhere, the whole economic condition of the country would be affected. Detroit and its particular community would be very seriously affected by such consequence.

2887 OCT. 30, 1923.

Cross-examination by Mr. BROWN (1441):

As to what we did during the coal strike, we received our cars in March this year. Prior to that we bought coal on the open market as best we could. We did not operate our plant successfully. We operated the best we could. We produce a total of 24 million feet of gas and Detroit gets about two and a half million or about ten per cent. (1442) There is no one else that we could sell gas to in Detroit. The institution in Detroit that supplies gas to the city is the Detroit City Gas Company. There is no company furnishing gas locally except the Detroit City Gas Company, and we furnish our gas to that company. (1443) I presume that in recent years all industry examines very carefully its coal supply. I can not very well testify as to whether engineers examine their boilers and the boilers or batteries are fixed up for the use of a certain kind of coal. I would say that would be good business to do it. It would seem good business for them to get that coal regularly to operate efficiently. I should think their closing down for the want of coal would be a serious matter. The difference between their closing down and our closing down I should say would be a great difference. It is something around 500 miles from our mines to our plant at Detroit, over which these 800 cars run. (1444) I am not conversant with the changes of train crews in that distance.

By Mr. HAMMOND:

The Banner Fork coal goes into our ovens with other high volatile and low volatile coal. We have never had occasion to put it in the ovens straight. From this mixture we get 24 million feet of gas a day on 2,400 tons of coke [coal]. (1445) We produce 15,000 gallons a day of coal tar on that tonnage. We get in the neighborhood of 1,700 tons of coke per day against the figure that
2888 I gave of coal consumption per day. This coal from Banner Fork is very low in sulphur, ash, and moisture. As to whether I consider the use of this coal carried in these privately assigned cars to be more beneficial to the public than the use of such coal for manufacture into gas by public utility companies serving the public, especially the number of inhabitants in the city of Detroit, I am not really versed in the public utility requirements, but I understand that that coal also makes very good gas coal. I have been told that the Detroit City Gas Company has a mine in Harlan County, adjoining our mines. I do not know how they transport the coal. The Detroit City Gas Company purchases gas from the Ford Motor Company, but it is not compulsory. My understanding of the reason that they buy it is because it is cheaper. As to the extent of operation of its mines, I am not familiar. I understand what the general conditions are and that our experience was a great deal the same as theirs was (1447) before we owned private cars.

By Mr. BOYD:

The original 1,004 private cars of the Ford Motor Company have been reduced now to 800. As to what became of the other 204 cars, along about July we ran into an acute car shortage on the Pere Marquette Railroad for delivering our core sand from the Manistee district to our plant and they were unable to secure cars, because there was an order out not to back haul the coal cars. They did not have the equipment of their own and we went into it thoroughly with the railroads, our traffic department, and it was very essential that we have the sand (1448); just as essential to have sand as it was to have coal. The coal situation appeared to be easy with 800 cars and almost gave our mine full operation. Therefore the obvious thing to do was to put the cars where they could give us sand
2889 and we put them in that service on the Pere Marquette. That is not to be a permanent arrangement. You only do that seasonally, because sand has to be in before freezing weather. You do not haul sand in the winter time on account of the moisture freezing the sand in the cars. Our plan right now is not return these cars to the service between our mine in Harlan County and Detroit. The plan is that as these cars finish in the sand service, which will be in a few days, we will turn them over to the Detroit, Toledo & Ironton Railroad and change the marking on them if that is necessary. (1449)

By Mr. GREEVER:

The ownership will not change. We will lease them to the Detroit, oledo & Ironton. There is not any contract to my knowledge. As how long that turning over was to last, there is no termination ecified. The D., T. & I. Railroad belongs largely to the Ford inter- sts, the control. (1450) I do not have statistics as to the number f users of coal who have private cars. It would seem obvious that he great majority of the users of coal have to buy coal in the open arket and rely on system cars. If we were not permitted to use ur private cars, that would mean that we would have to do as most ther people do. I believe that my testimony shows that there is a ery great hardship in that. By "very great hardship" I do not nean loss of profit to the Ford interest. (1451) I mean that the rice of the product is increased. That does not necessarily mean a oss of profits to the Ford interests. I would not say we would not ouch our profits. To add to the price of our product the increased ost of coal is normal business procedure. To protect the public in the purchase of the Ford product is one of the reasons that we 990 have these private cars. There are many other reasons besides that. My testimony covers the reasons very fully. I should not say that all of my reasons are financial. I would not say that the employment of men is financial. (1452) I would not say that we would want to keep our men so that we would have them there when we need them. We naturally want to keep our organization and keep them employed. That is good business. That is not a financial reason only. It is the desire to give these men steady work and not to have to lay them off, causing them and their families to suffer. (1453) If we were forced to go on the market, we would have to pay more for coal. That same thing may be true of all other manufacturers. That is possibly so. I am not in touch with other manufacturers. As to whether the effect is the same, whether it is the Ford Motor Company, or some other company, I do not know. I can not testify.

By Mr. LIVERIGHT: (1455)

I would say that our primary object in buying these private cars was to overcome the inability of the Louisville & Nashville Railroad to perform its common carrier duties. As to whether, if it were to work efficiently and if sufficient equipment, sufficient motive opwer, sufficient tracks, and sufficient terminals were supplied, we could dispense with these private cars quite handily, we could if that were truly the fact and we could bank on it. They did not ask us to buy the cars. We asked them for leave to place the cars on their tracks. We have no contract with them with relation to these cars. (1456) I understand a contract is not required. We have bought 120,000 acres of coal which are still undeveloped. Whether the carrying charges on that coal land are passed on to our consumers would be a matter of cost accounting in the Fordson Coal Company that I am

not familiar with. (1457) The ash content of our high-
2891 volatile coal runs 8 per cent and under, and of our low-volatile coal 6 per cent and under.

By Mr. ROPIQUET:

If we did not have assigned cars, the effect would be practically the necessity of our either reducing the wages of our employees or increasing the cost of our product, and the result would be very calamitous to the Detroit territory generally, assuming that there were a repetition of laying off the men for an extended period, as we had to do last year for three or four days. That is one of the reasons we have got assigned cars. (1458) I do not have the figures as to the profits of the Ford Company last year. As to whether there might be a third alternative there, namely, reducing those profits instead of reducing the wages or increasing the price, possibly you do not appreciate on what a close margin our company does business, but there will be a witness to follow, I believe, who will be able to give that information. I estimated that it would mean one dollar difference in the cost of the unit. If that increase were placed upon the sale price, I would not call it a calamity. As to whether that would increase the first initial $5.00 payment to $6.00 (1459), I do not see that much difference.

By Mr. CURRY:

I am more or less in charge of securing coal for the coke ovens for the Ford Company. I do not believe I know of a plant where by-product coke is manufactured at the mines, unless it would be in the Pennsylvania district where they have coal deposits near the large cities. In order to have a by-product plant at the mine, with a plant of our kind you have the problem of drawing the ore to the coal or drawing the coke to Detroit. If you draw the coke
2892 to Detroit, you have to dispose of your gas at some place in that vicinity. Our mine is situated at Banner Fork. If the by-product plants were located at the mine, you would have the problem of hauling low volatile coal from the West Virginia field to the Banner Fork field and then you would have the problem of disposing of your gas into manufacturing plants, which is quite impracticable in that territory. You could, of course (1460), haul your coke and your tar and ammonium sulphate to Detroit. By-product coke ovens have proved economical in the manufacture of our products at Detroit. I do not know of any manufacturers in the automobile field who have adopted that economy. They buy their steel. We buy quite a lot of steel too. We are not makers of steel as yet. I do not know of any other automobile manufacturer that has any by-product ovens. As to providing for the contingency in case the Banner Fork on the Louisville & Nashville should be put out of business because of an explosion or something of that sort, there are two mines there and they are a little over a mile apart.

If there should be an accident at one mine, we could limp along with the other mine until we found some way out of it.

2893 (1461) I would not say that each is of sufficient capacity to furnish our needs but they would furnish a large enough volume for the coke ovens alone. The total production is 3,000 and they run about 1,500 tons each. As to our plan in case of a strike, in the first place a strike in the Ford Motor Company is a thing we really do not figure on, as far as labor trouble is concerned; we try to keep our labor satisfied, pay them a reasonable wage, and give them steady work six days a week and we believe if we do that we are not going to have labor trouble. We draw some of our by-product coking coal from the Pond Creek mine. The volume is smaller than the Banner Fork in the by-product oven. That mine is located on the Norfolk & Western. (1462) It has a capacity of approximately 7,000 tons a day. The Ford Company does not take the entire output when it can get the cars into our plant. Some of that coal is sold to suppliers of ours, people who furnish us with material. Some of it goes into our plant. Some to branches. It has quite a broad distribution. The Pond Creek coal would not make as good coke as the Banner Fork coal because the volatile content is lower than in the Banner Fork. The Banner Fork coal and coal from that territory is very desirable from a coking standpoint and it is a high volatile coal. Pond Creek coal is good coking coal but it is not equal to Banner Fork. (1463) As to the coal from the Pond Creek mine, we get together with our mine manager, Mr. Lunsford, once every two or four weeks and work out our requirements from the mines and then he disposes of the rest. I can give an idea as to approximately what we take from that mine now. For the week ending Oct. 20, we used 5,900 tons at the Rouge plant. 108 tons went to employees and the Ford Hospital for steam. We take about a thousand tons a day from that mine. As to operating to full capacity, they have not had a full car supply. I understand the car supply has increased considerably in the last week or ten

2894 days. As I understand it they have been operating to the capacity of the car supply. (1464) The cost at Pond Creek mine obviously is higher than the Banner Fork mine, because of the car supply. As I remember the Pond Creek cost runs about $2.75 a ton. The cost at the other mine was a little under $2.00, I think, since the private cars were acquired. The cost prior to that was about $4.00 on a car supply of less than three days.

Redirect examination by Mr. LONGLEY:

I testified that the keeping of the men employed was something different than a mere financial matter. (1465) I believe I used a figure of one-third or more as the percent of the total labor supply available in Detroit and its immediate neighborhood which the Ford Motor Company employs. I would say that the throwing out of employment of that number of men would cause great distress and

would be a calamity and that it would affect the butcher, the grocer, the drug store man, and everyone else in the community.

Recross-examination by Mr. GREEVER:

As to the effect of throwing out of employment the men in mines not supplied with private cars, I would say that the throwing out of employment of men at any time (1466) is a thing that an employer should consider very seriously and certainly never should throw his men out of work if there is any way to avoid it. I do not know of any reason why Detroit men should be protected more than the men at the mines. I think that is a labor problem that would apply to any business. The throwing of a large number of men out of employment is a very serious problem. But I do see this difference, that in our particular case, in the city of Detroit something over a million people are largely dependent upon the con-
2895 tinuous operation of the Ford Motor Company, and when I say that we employ one-third or more of all the labor that there is in the territory approximately covered by Wayne county, there would be a very serious effect on a large community. I cannot imagine the same thing applying to the mines, where it would affect so many people. My idea is not that the number of people affected should control. I made that quite broad to begin with. (1467) As to whether I think there would be any preference given to a large number of men in Detroit, I believe that every man should work for an employer who would keep him busy six days a week. (1468) If an employer who keeps his men busy six days a week cannot have assigned cars and cannot employ his men steadily on account of other employers having assigned cars, I would look out for another job if I were an employee of a company of that kind.

By Director BARTEL:

I am not very well conversant with the mining operations in the country other than our own. I am not in contact with that. I discuss it right along with Mr. Lunsford, but I do not spend my time in the field. As to what would happen if every mine in this country now in operation would continue to operate for six days a week, I understand it generally in this way, that there is an oversupply of coal if every mine works six days a week. (1469) There is also an oversupply of labor. I won't say that I know that. I understand that is the case from our men that are in the field and from what records I have read. It would be the natural result, then, if the mines do work six days a week, that this mine that worked six days would throw the other mines idle; would throw the men from the mine into other business where they could work six days a week. I understand the potential capacity of all the mines in this
2896 country is about double what we consume. It would be quite obvious that to keep every mine working six days a week and keep all the labor employed six days a week you would have to find an outlet for your coal greater than past consumption has indicated

or you would have to shut up a certain number of mines and the men would go into other fields of employment. I believe that clean competition takes care of those things. (1470)

By Commissioner Cox:

The Ford interests have a certain number of employees, which is based upon certain production per day, per week, and per month. We desire ordinarily to figure our raw materials, etc., so that the supply of these raw materials is furnished concurrently so as to take care of our daily, weekly, and monthly production. From our selling standpoint the basis of these contracts for supplies, the prices, etc., is determined before our fixed price is made on the product of our plant. We figure our cost before we determine upon what relative price basis can be fixed intelligently for a reasonable period. We have to base our figures on past experiences, and then if the program is increased, which it usually is, we estimate that the increased production will give us certain economies, and (1471) then we watch our cost figures for that purpose. We could not, with a week-to-week arrangement, go in the open market and with any reasonable degree of certainty fix a price for a reasonable period on our costs or on our selling prices. As to whether we could even on a monthly arrangement, my answer is, yes. Coal is one of our important raw materials in our industry. We have to contract in advance for coal, the same as we do steel, lumber, and all other materials that we use. If we should find that by virtue of some condition over which we had no control many of these contracts which we have arranged for were disturbed and we were not able 2897 to get our current supply of raw materials (1472), which might eventually necessitate the closing down of our organization, say, for one or two or three days a week, that would not only work a great hardship to our organization from the standpoint of organization, but also distress many employees and their families and the community generally. I would not say that if we were forced by virtue of these untoward conditions to operate our plant on a four day basis, from the standpoint of economy to the country generally, it would be fair for us to insist that all other automobile industries would go on a four days basis. I would feel that we had no right to suggest what should happen to the other automobile manufacturers by virtue of our disability. (1473)

WM. E. CARNEGIE, called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. LONGLEY:

I am auditor of manufacture of the Ford Motor Company and in charge of cost accounts of that company. I am familiar with the sales prices of the Ford Motor Company products. It is the policy of the Ford Motor Company to establish sales prices as close as possible to the prevailing cost prices. From time to time when reductions are made in sales price, that price is reduced as

close as can reasonably be done to the cost of manufacture. It has been the past experience that the reduction in the sales prices results in increased sales volume and consequently an increased production. This increased production, together with concentration upon buying and manufacturing methods, with the idea of working all possible savings, is what has resulted in the profit in the past. Instructions to the organizations are always given at the time of every cut in the sales prices, to review the entire
2898 field very carefully in order to see that all possible savings and economies in operation will be observed. (1475) Very specific instructions are given to the purchasing department, the manufacturing department, and all other departments throughout the organization, to cut their cost, to review their cost and see where savings and economies can be made. The profit is almost entirely dependent on those economies and savings. After savings and economies in operation have resulted in a reasonable profit and further reduction in sales prices is made, it naturally creates a new cost target. Because of the distribution of the product among all classes of people, there can be little doubt but that the reduction has benefited the public. That is, just as savings are made in the course of that process, reductions are made in the sales price, which increases production and further increases the chance for making reductions in cost. (1477) There has been a reduction lately. The last reduction was effective Oct. 2, 1923. At the time the reduction was made the last available figure showed that each one dollar in sales resulted in a profit of about seven cents. (1478) At the time the reduction was made it was estimated that the proposed reduction, which was to become effective Oct. 2, would reduce the margin of profit to approximately four cents per dollar of sales. It must be borne in mind that in order to obtain minimum cost of production in our business such cost can only be obtained by what we know as "beeline operation." And any influence that tends to slow up those operations or in any way divert them from their usual channels, necessarily results in an immediate increased cost.

Cross-examination by Mr. GREEVER:

As to whether I regard Ford products as a public necessity, I can hardly answer that question. I have nothing to do with
2899 the distribution of our products whatsoever. (1479) I have outlined our financial plan of doing business, the object of which is to do business at the lowest possible cost and still make money and do a large volume of business. That is the total effect of my evidence.

By Mr. LIVERIGHT:

By "beeline operation" I mean right straight just as the crow flies. Our operations must start at a given point and go to the finished product by the most direct route. We put everything in a

groove and it has got to go there. (1480) We have a number of different ways of handling such a situation as when a man comes to the plant and is held up by some breakdown. Such situations occur occasionally in small ways. One common way to take care of this is that if it is just for a short time, an hour or two, we can very often divert the labor from one job to another. We most always have somewhere that we can distribute a small number of men. If it lasted any length of time we would be forced to lay the men off. That would be the same in the case of a coal shortage. We do not pay men when they are not working; not even when they are held at our plant by reason of these breakdowns in the continuity of our process. We send the men home. (1481) I have not an accurate idea as to the proportion of our employees that are sent away in that manner. Those men in many instances have families dependent upon them. Quite a large proportion of our men are married men. We have never claimed to be a philanthropic institution. In our business it is a highly intensive point that our operations must remain undisturbed. Once we have created a certain plan of operation and have equipped for it, we must follow that line until we have adopted some other plan. We must work as continuously and just as intensively as the by-product coke plant in order to bring about results (1482) and must have just as continuous 2900 and regular supply of coal in order to bring about the results.

As to whether the economies effected by us through this continuity of operation are different from the economies that would be effected at a coal mine, I think the previous testimony has indicated that there are some differences. For instance, our volume of business is so large that it effects so many people and so greatly effects the Detroit area as a whole. It is very largely a question of magnitude of operations. I could not say as to whether the same principle would apply to a coal mine that was operating on system cars. (1483) I had not given that matter any thought whatsoever. As to our own mine before we got assigned cars, we did not run continuously and our production cost was very high. And after we got our private cars it was reduced very materially. I should think that the principle for which I have been contending does apply to coal mines as well as to motor plants, in a way. In a field where we had 100 per cent car supply and our neighbor did not have private or assigned cars and only got a 50 per cent car supply, he would be at a great disadvantage as compared with us (1484) both in the matter of production costs and in holding labor. The main object of this continuity of process is to turn out products to the public at an economical price.

By Mr. GREEVER:

About one-third of the population would be affected by closing down or slowing down the Ford plant. (1485) If in the coal field where there is a car shortage the assigned car mine gets 100 per cent and the remainder of the community all up this river for miles and

miles gets 20 per cent car supply, a 100 per cent of that population totally dependent on the mines is affected.

By Mr. BROWDER:

It would seem to me that if there are more miners in a certain area than are needed, some of them should reach other lines
2901 of industry in some manner. As to whether if we did not have these private cars and did not get six days' production in our mine, other mines would work any more days because we worked less, I have very slight familiarity with the mining proposition and would not really be in a position to answer that question.

By Mr. GREEVER (1486):

I do not know whether every man works every day in our mines. I am not familiar with our mines.

H. F. PERKINS, called as a witness and having been duly sworn, testified as follows (1489):

Direct examination by Mr. BROWDER:

I am first vice president of the International Harvester Company and president of the Wisconsin Steel Company, its subsidiary. I have been president of the Wisconsin Steel Company since its organization and have occupied positions with the International Harvester Company, beginning with the organization of its purchasing department, then taking charge of its raw-materials divisions, then becoming vice president in charge of all manufacture, including the production of raw materials, and for the last year or more, executive vice president, retaining direction of the division of raw materials and that end of the business. Throughout my employment in the Harvester Company and the Wisconsin Steel Company (1490) I have been familiar with the general operations of the companies. The International Harvester Company is a producer of implements used on the farms in the preparation of the soil, the cultivation of the crop, and the harvesting of the same, together with such matters as haulage apparatus, like trucks and farm wagons. Its plants are located principally in the Chicago district, but in various other cities of the United States, as well. It also owns the ore mines and the steel properties, with the exception
2902 of the coal mines which are the property of the subsidiary, the Wisconsin Steel Company, that operates in a location know as Benham on Looney Creek, a tributary of the Poor Fork River along the line of the Louisville & Nashville Railroad on its Cumberland Valley branch. The business of the Wisconsin Steel Company is the mining and shipping of coal. (1491) The International Harvester Company employs at the present time around 25,000 people and the steel company about 1,000. As to the purchase of the Wisconsin Steel Company mine, when the International Harvester Company was in process of organization in 1902 these lands were in process of acquirement by one of the subsidiaries of the

International Harvester Company. The completion of that gathering together was done by the International Harvester Company and a block of about 21,000 acres purchased. This property lay very isolated, being about sixty miles fro many available transportation line that was likely to be put through. Tunnels might have brought it, I think, within 16 miles, but it was an impractical proposition. A long time was spent in blocking the property up (1492) from many sources, and little was done with it until about 1906, when I took over the steel operations, the raw-material operations, including this property. We began to give serious consideration to developing it, examined the coal very thoroughly, and made tests of its qualities as a coking coal, particularly in various ways through our neighbors then engaged in the manufacture of coke in the Stonega district. It was a very great expense and trouble to do that, of course. We had to haul the coal some 30 or 40 miles over mountain roads to make those tests. Fnally, about 1908, we concluded that we needed this coal, and we began considering the development of the railroad to open it up for us, but the L. & N. indicated their desire to do it for us, and we preferred to have that done, so that we entered into a contract with the L. & N. in 1909 or 1910 by which they agreed to build a road from a point near Pineville, then known as Aubey, and now I think known
2903 as Acosta, some 61 or 62 miles into a location which we would choose in this property on Poor Fork and on Looney Creek. (1493) We, in consideration, agreed to erect, within one year from the time the rails reached us, a battery of 300 beehive coke ovens and then to continue the development as conditions justified in relation to our requirements of consumption. The connection was made in 1911, and the first coke came out of our operations in 1912. 300 ovens were constructed in the beginning, and about a year later 108 more, making 408 in all, which was the extent of our beehive-oven development on this property. The capacity of the mines developed at the present time is about 4,000 tons a day. We have two mines there in different mountains. There is capacity there for further development commensurate with the needs of the companies. (1494) We selected the section which they believed to be the very finest core of the seams we were interested in and set aside about six or seven thousand acres and sold the rest so that there is an opportunity for almost any development that might be desired. As to our blast furnaces in South Chicago, the steel interests of the Harvester Company consist of ore mines in the Messaba district, owned and operated under long leases, for the transportation of the ore in part to our docks at South Chicago on the Calumet River, where we have located three blast furnaces and four finishing producing mills, besides the equal equipment of blooming mills and Bessemer for the preparation of the steel, and also have built a by-product coke plant and are now building an open-hearth plant. Prior to the introduction of our by-product coke ovens, we were naturally dependent upon purchasing

coke to the extent that our own 300 or 400 ovens at Benham did not supply our needs. We were dependent largely upon beehive coke. (1495) Of course, after by-product coke began to be introduced we could buy by-product coke, but they did not mix very well. The quality of this Benham beehive coke was contingent upon the character of the coal that we owned there. Our investiga-
2904 tion had developed the fact that the coal was a very unusual chemical purity, metallurgical standards being the comparisons, and the quality of it in the coke form was found to be very high and its burden-carrying capacity as a furnace coke very satisfactory. The peculiar points were that it was high in carbon with very, very little sulphur and a very, very little phosphorus. In fact, we are makers of Bessemer metal and there are certain standards for the making of Bessemer metal prevailing before the discovery of this small field of relatively extra superior coal, and our coke is about one-half sulphur and phosphorus of the old-fashioned standards. We did not have any trouble with uniformity in the coke at that time. (1496) Uniformity is essential to good furnace practice. I am talking about blast-furnace practice and not by-product practice; both for supplemental and economical purposes there must be unifo'mity of structure and quality. The beehive ovens are located adjacent to the mine, and if the mine is right and ordinary methods are pursued in the manufacture of coke the coke is right. The coke car supply through those years was fairly good. We had our own occasional troubles in those days through car shortage, but we used racks and for a while were the only people in that vicinity; we came up at the end of 60 miles of railroad and had opened up that whole country for future development. It was our initial examinations and tests that proved that country for all successors. We had fairly good service. I had been studying the question of by-product ovens for a long time, realizing that the essential trend in America, as in the more advanced metallurgic countries of Europe (1497), must be toward the economy of fuel involved in such a method of making coke; but there had not been in those years of this study a development of by-product coke construction adapted to high volatile coals in the proportion that we desired to use them.
That was a later development. But it had come into very
2905 conspicuous improvement over the existing conditions at the time of the war. The Government knew of this fact. They knew, also, of this particularly available metallurgical coal and our furnaces and our availability as large manufacturers in the international line, and they approached up on the problem of building by-product ovens. This was in 1918. I was in Washington at that time working here, and it so happened that I attended to the negotiations with the Government officials which led to the building of our by-product coke ovens. They stated to us that they would like to have us build these first, as they said, to conserve fuel. I copied a clause: "To make coke products of high quality to be used in

making military supplies and to furnish toluol and sulphate of ammonia to the Government for munition purposes." They, of course, expected us with our very large operating facilities (1498) to turn our plants, as much as the supply of agricultural implements made possible, over to the manufacture of Government needs. A contract was entered into on July 28, 1918, for the construction and operation of 88 coke ovens at a cost of about four and one-half million dollars. That was a very high cost. It involved us also in extensions of our field developments at Benham to about a million dollars additional. We opened up another coal mine and extended the workings in our first coal mine and, of course, had to build a tipple and connecting tracks and all the other necessary requirements and quite a lot of houses. We had to add to our power and everything else, so it cost us about a million dollars at Benham. I stated to our people at the time I asked for the appropriation that as a commercial venture at that time and at those costs it was not warranted, but that we were bound to do it under the conditions then existing. These by-product ovens in South Chicago were designed with reference to the coking of a particular coal.

2906 (1499) That has been clearly pointed out by other witnesses and is always the way by-product coke ovens are constructed. Our engineers knew of just the coke that we were desiring to use and of our desire to use as large a proportion of our own coal as we could possibly use, and the ovens were designed to meet Benham coal. The by-product ovens were not placed in operation as soon as they were ready. We built two batteries of 44 ovens each. Mr. Rust in his evidence emphasising the importance of a steady supply of fuel to a by-product coke oven mentioned the fact that there should be no interruption; that the maintainance of heat in them is of vital necessity if they are not going to crumble away, and it is also necessary to fire them very slowly. It takes about six weeks before you can charge a by-product battery after you have completed it and have the coal available. The heating up of our first battery of 44 ovens began in August, 1919, and should have been ready by the first of October, but on account of a shortage of coal due to the car shortage of the L. & N. road we were unable (1500) to blow them in—that is, push the first coke—until the middle of November. The heating of the second battery began in September, 1919, and would normally have been completed about November 1. However, on account of shortage of coal from Benham due to car shortage, the first coal could not be charged into this battery until about February 1, 1920, and in the meantime our storage had been sadly depleted. That was the year in which for six months we only got coal enough so that during six months we operated about half (1501) the product under normal conditions that those by-product ovens should have produced, and during the other six months our operations were held at from one-half to two-thirds, so that we suffered very heavy

2907 losses. As our ovens drew toward completion the People's Gas Light & Coke Company of the city of Chicago quite

unexpectedly to us came to us and stated their case. They were unable to get under satisfactory conditions the gas that they were able to furnish to the city of Chicago, and they urged that we enter into a contract with them to supply them with all the gas that we could supply outside of such as was necessary to heat our own operation ovens. They apparently were in dire need and had short facilities even when operated at capacity at that time. As a result of our negotiations we entered into a rather jug-handled contract, in that we did not dare to permit ourselves under those fuel conditions a very considerable amount of coal, so we made a contract that was very widespread. In the early part of 1920 we entered into a contract where we agreed to furnish them from 4,000,000 to 9,000,000 cubic feet of gas per day for a period of two years. (1502) They wanted everything we could produce outside of what went to the natural operation of the by-product furnaces themselves. This contract was based, of course, upon the Illinois Public Service Commission requirements for standard gas. The gas company was dependent upon the full performance of this contract to enable it to fulfill its requirements to the city of Chicago. We were not able to deliver all the gas they wanted, and they were on our heels all the time for more. Both the gas company and the Wisconsin Steel Company repeatedly tried to get a preferential order from Washington to cover the coal for these coke ovens, but relief was never granted, so that we were never able to supply more than about half the gas which they wanted us to furnish and which we desired to furnish. What in the
2908 meantime happened to our blast-furnace operations is rather a sad tale. As I stated we were operating only half the time, only half of our capacity and the other half, from one-half to two-thirds in these by-product ovens, with great expense, and so consequently (1503) we were keeping our beehive ovens in Benham going to help us out and buying everything we could to operate at that time and were also buying coke on the outside wherever we could get it, and still we were unable to maintain full operation during the year 1920. Roughly the figures showed a curtailment during 1920 of about 20 per cent of our steel operations. Indicating just how that affected us, in April, 1920, we had all three of our furnaces banked part of the time and that resulted in a loss of about 40 per cent, some 18,000 tons of pig iron, as I remember, that we should have. In May we had to bank the furnaces again and the whole situation was so impossible that we concluded that rather than bank one furnace after another we would put one out, so we put out our No. A furnace entirely, although we needed its product. We could not put it in again during 1920 from May on, and in spite of this reduction in output we had to bank one or the other of the other two furnaces practically every month during the year 1920 from then on. We supplemented what coke we had there with coke from Benham and also with coke on the market. With

respect to the market coke, we had a very bad time. We were trying simply to keep moving. (1504) We bought some good coke, and yet we were unable to keep ourselves adequately supplied. We never pursued the policy of buying inferior coke and keeping going. We keep our standards of quality up and if we can not keep them up we shut down. As to the labor situation at the mines and by-product plant, the inevitable results followed. Our mines were irregularly occupied, and consequently our whole steel plant was badly
2909 mixed up, including the by-product ovens. There was irregular, incomplete occupation of our men, and the result was that it went right on into the manufacture of harvesting machinery. I was busy with the subject of how this industry with some $20,000,000 in it was going to be protected, speaking of the steel end of it only, and was beginning to give consideration to the purchase of private cars. In order that we might have the matter for the full consideration of our general attorney, I asked my first assistant, the vice president of the Wisconsin Steel Company, Mr. Biggert, to prepare a letter (1505) in detail outlining the conditions broadly but accurately for the study of our general attorney, Mr. Snow. That letter was written and is here. I have prepared an exhibit showing the letter from Mr. C. S. Biggert to Mr. S. D. Snow, the letter being dated April 14, 1920.

(The document referred to was offered and received in evidence as Exhibit No. R–27.) (1506)

(1507) With respect to reports on the employment situation in the steel and by-product and mining industry, those reports are constant, and I am in constant touch (1508) with them as president of the company, and I know the conditions and can recite them briefly myself. What I was trying to get at at that time was how serious our condition was and how much we had to do in order to remedy it, and I remember this, that we had at that time 500 to 1,000 men out of employment regularly at the steel mill and from 300 to 600 men at the coal mines in eastern Kentucky out of employment regularly. Our operations were being interrupted physically as well as through this sacrifice of human effort all through the plant, as heretofore described. To relieve this situation the next step was to get into consultation with the L. & N. railroad as
2910 to the prospects of car supply for the future, inasmuch as our operations were being so seriously jeopardized. (1509) We had many and various contacts, of course, and April 9, 1920, we had a personal conference of the highest officers of our company with the high officers of the L. & N., including Mr. Waters, their chairman, and Mr. Mapother, representing the president. I was there. The result of the story of our conditions and of their conditions of car shortage led to their encouragement that we could probably find our only protection in the purchase of private cars. They recommended that that step be pursued, and we immediately took under consideration whether we could carry out that suggestion. We were loath to

do so, of course, because it involved a large money expenditure. Our figures showed it would require about 500 cars with an approximate cost at that time of $1,500,000. There is pretty cool weather between Benham and Chicago at times, and we have various interruptions, so it was necessary for us, if we were going to spend so much money, to try to do a job that would protect our operations fairly well. (1510) We had to provide insurance and storage facilities at a cost of about half a million dollars additional. We certainly did make an investigation of the status of the private car before we made this investment. I requested our general attorney, Mr. Snow, to make a thorough investigation of the legal status of private cars. He advised me on his own study of the situation that private-car owners had been entitled to the full and exclusive use of cars, regardless of car shortages, and that these rights had been fortified by the interstate commerce act and especially recognized by the regulations of the commission. One of the things which I particularly noted
2911 was his statement that the rights of private-car owners had existed throughout the war.

By Mr. BROWN:

(1511) That was his legal opinion. Then we proceeded to ask him to make a special investigation of the situation to support or otherwise affect his judgment in the matter and his advice to us as to what rights we would have, so that he came down to see the commission in April, I think, 1920, in our behalf. It was about the same time of this conversation with the L. & N. officials, either a little before or a little after.

By Mr. BROWDER:

He came back and reported to me that he had interviewed Chairman Clark of the commission and received an assurance that so far as the commissioner knew the commission did not propose to make any change in the existing rules. Mr. Snow tried to buttress his opinion by conference with the officials of the United States Railroad Administration regarding the advisability and legality of private cars and secured a letter dated April 17, 1920, from Mr. Frank C. Wright, (1512) of the division of liquidation of claims, on that subject. This letter was turned over to me at that time. I have prepared an exhibit of that letter. Mr. Snow was an officer of our corporation. He died a year or two ago.

(1518) (Objection to admitting this exhibit in evidence was sustained, and the exhibit was marked Exhibit R–28 for identification.)

By Mr. BROWDER:

(1519) Mr. Snow reported to me at that time and showed me this letter. As to whether I relied upon this letter; (1520) I relied upon the combination of the evidence that has been submitted. As a result of this investigation we bought in 1920, 500 hopper-bottom, 50-ton cars at a cost of about $1,500,000. These cars began
2912 to be delivered in October of that year, and delivery was completed in November. (1521) These cars were placed in

shuttle-train service between Benham, Ky., and the coke and blast-furnace plants in South Chicago. In the summer time they go to Toledo regularly for boat-loading to South Chicago. The effect has been fairly uniform operation since. This delivery began in October, 1920. The first loading occurred about the last of that month. We have had a reasonably certain supply of Benham coal at our by-product ovens in the interval. During 1921 it was easy, of course. We had as fair conditions as you could expect in normal times, although we did not receive absolutely full supply in 1922, due to irregularities in the placement and transportation of cars. Nor have we have absolutely full service in 1923. However the increased car supply has been of inestimable advantage in the steady and successful operation of our by-product ovens, our blast furnaces, our steel plant, and our harvester plant. The storage facilities and insurance facilities I spoke of have been completed. (1522) They will store about 125,000 tons—about 60 to 90 days' supply. As to whether that storage and insurance, as I call it, is a practical operation, it is not. In 1922 we could not get it filled up on account of the car shortage. In 1923 we were hoping to, but it is an undesirable method of handling coal for high-grade coke making, because the storing of it in the air deteriorates the quality and is apt to result through exposure in poor-quality coke, and there is an additional danger of fire which we have to guard against at some expense and of course with disadvantage to the character of the fuel. So far as my knowledge goes there has not been any complaint of the operation of our private cars by any one other than in this proceeding. We thought they were friendly. We are still
2913 under a duty to furnish gas to the city of Chicago. The original contract was for two years and was then continued for ten years. (1523) That second contract was made March 1, 1922, and covers all we could produce up to 9,000,000 feet of gas a day. We are of course in constant communication with the officials of the gas company regarding the necessity of our gas, and they are on top of us all the time for the supply of their gas, and have also been good enough to furnish us a statement of the proportion of the deliveries of our gas for a period of two years, I think, and its relation to their entire gas supply in the city of Chicago. I have prepared an exhibit of a letter under date of October 20, 1923, from D. T. Mitchell, treasurer of the People's Gas Light & Coke Company, addressed to the Wisconsin Steel Company, 606 South Michigan Avenue, Chicago, Ill. This exhibit shows that on an average in that period we were producing about 10 per cent of their total gas supply. (1524)

(The paper referred to was offered and received in evidence as Exhibit No. R–29.)

If the proposed order should become effective, we would have to dispose of our private cars in some way. We could not burn them

up. Unfortunately we can not do that, being steel. We could sink them, or sell them if we could. As to the effect on our operation if we did not have these cars, I believe that history repeats itself. Under similar conditions similar results will be obtained. We have shown, I think, with some clearness what happened to us (1525) when we did not have these cars, and that the result of the purchase was a very much better continuous operation of our facilities. Starting with the employment of our men at the mines, for the production of coal regularly of a suitable character going to by-product coke ovens, which must be operated continuously without in-
2914 curring great losses, the maintenance of blast furnaces on an operation that is economical and full, producing high-grade metal for the purposes of the steel-making interests of the International Harvester Company, to interfere with such facilities in the way they were interfered with in 1919 and 1920 is undesirable from every standpoint that I have been able to view the question, and we are of course extremely anxious that a recurrence to the old conditions with the unemployment that results therefrom, the loss of profits, and the loss of steady operation shall not be imposed upon us where there is no advantage to be gained by anybody else through dragging our condition into an inferior situation. As to giving thought to what we could do to overcome the difficulties which would result from operation without private cars, I confess that in view of our investigation at the time we purchased cars and in view of the fact that the evidence (1526) as presented for the first time before this commission seems to be overwhelmingly in support of the continuation of the present policy, I have not been inclined to give such a contingent result any serious consideration, because it is so big a question that should my hope and anticipation be disappointed it would be a matter not of snap judgment but of the most careful, long, and heart-breaking judgment and thought and study of the whole problem. Nothing that I could think of would be more like amputating a limb of the steel business than to deny the use of these private cars in a satisfactory, continuous way. It is part of the system of steel operation as conducted to-day, and I think it is one of the most advanced manufacturing arts existing in the country. What we would do under those conditions I do not care to hazard a guess on. Other people have suggested the overdevelopment of mines. I think the answer to that is that it may be forced,
2915 and I am sure the commission will consider the great disadvantages of such a situation in rendering their decision. By "overdevelopment" I mean developing beyond the regular requirements of the steel business so as to have tonnage available in times of car shortage. (1527)

Cross-examination by Mr. BROWN:

I consider the selling of gas to the city of Chicago as part of my necessity as a manager of the corporation to make the most out of

the facilities of that corporation intrusted to my care. There is no known method in the steel business by which Sunday gas can be utilized. We can not send out our Sunday gas without selling the rest of our gas, which would not pay. The needs of the city at that time were such that after canvassing the whole problem we concluded that it was good business to make the contract. As to whether the city of Chicago would purchase gas from us unless it could get it cheaper than it could produce it, we purchased fuel a good many years at a higher cost (1528) than we could have produced it for, because we did not have the mines. I suppose they have not the plant. It would take a long while to build a plant. We had them coming along. As the city grew, they were caught short. I do not know that by the use of these private cars we were furnishing the city of Chicago cheaper gas. We are furnishing them more gas. As to whether I mean to convey to the commission by what I have said and letters I have tried to introduce that this commission is estopped from finding what the law is with respect to the use of our cars, my answer is no. I have trust in their integrity and their good judgment too. (1529) As to whether if the United States had not intervened in 1919 we would have continued to use our beehive-oven coke, I do not know what we would have done if our conditions had been different. 2916 I think we would have been forced to the building of them [the by-product coke ovens] by the fact that practically everybody else in the business went into that. That was the moving factor in our going into that. I don't believe the possession of our private cars would enable us to sell those coal properties for a cent more than if we did not have them. We have one property, (1530) one contiguous coal area. We have two mines. We send to one of those mines under the L. & N. rules our private cars and to the other mine system cars. As to the system-car mine we take our luck under the regulations and rules governing system cars and get the same treatment as everybody else. Those mines have no names; they are No. 1 and No. 2. They are in the corporate control of the Wisconsin Steel Company. (1531) No. 1 is the larger mine and is the one that gets private cars. Our regular program is the use of those cars. We could change it to-morrow if we wanted to. I think the distance from that mine to Chicago is about 575 miles. The mine is operated fairly continuously. As to whether we send those cars from our plants in trainloads down there, the railroad handles them. We deliver them as fast as we load them on our tracks, (1532) or on theirs, according to the condition, and they take them away. What they do with them is their business, not mine. We do not permit any traffic other than coal to be hauled in our private cars. We tender the cars at Cincinnati or Louisville to the L. & N. We give them to some railroad in Chicago. We give them to the railroads as fast as they empty them and the train that takes them gathers them together and carries them forward in the most available way.

2917 By Mr. LIVERIGHT:

(1534) We first acquired these coal lands in Kentucky in 1900, 1902, or 1903. The purchase was undertaken by the Deering Harvester Company but was not completed when the consolidation took place, and the International Harvester Company bought a good deal of them. The final piece of property was owned by the International Harvester Company I will say about 1903. (1535) The purpose of the purchase was to supply fuel for the requirements of the International Harvester Company. We were looking a good many years into the future. We had in mind, in buying the lands, primarily fuel for the making of coke or high-grade fuel that could be used for any purpose that we might later decide. At that time we had in mine beehive coke. To say that the other kind of coke was in its infancy is hardly correct, because by-product coke ovens were highly developed in other countries and the American development was following along. There were a large number of by-product coke plants in this country at this time. At the time of buying these coal lands we were not ready to consider the question of by-product coke ovens. We retained these coal lands undeveloped (1536) until we got a railroad in there. The investigation of the available coal lands at reasonable prices led us to this property, among others, that was not yet taken up and could be secured at a reasonable figure. We found out by investigation that it was high-grade coal, as far as we could judge, for any use whatsoever in our line. It showed high carbon, sulphur running very low, phosphorus surprisingly low, and a volatile which indicated it would be available for by-product purposes. I cannot give the carbon content offhand. The volatile
2918 was from around 37 to 40, an average, say, of about 37. The ash content was very low, around 3. The sulphur content was about .40 or .50. The phosphorus was .006 or .008, around in there, very low. As to whether that content obtained precisely throughout the coal properties (1537), there are a number of seams of coal through this land. We have available a source of coal which will be high-grade steam coal that will not be available for by-product purposes or for coke-making purposes. There are two or three seams which we believe will make by-product coke, but one of them particularly adapted for that purpose and of commercial size to operate. In 1910 we negotiated with the Louisville & Nashville for the construction of a railroad from Acosta across the country about 60 miles. The Louisville & Nashville built it entirely on their own account. I don't know how it was paid for. I think Mr. Asher built a short-line railroad up to his sawmill, which was later taken over by the Louisville & Nashville, and this was an extension of it. At the time of the bargain with the Louisville & Nashville there was nothing said about private cars. (1538) They were not in our consideration at all. I can not give the exact date when we put out the first ton of coal from our operations. I was around that territory

every few months, but it was in 1912 some time. Of course that is not true either. We made a contract that we would have our ovens ready, 300 of them, within a year from the time the rails connected up into our vicinity; and we went in there and worked for a year, 60 miles from the railroad, 30 odd miles from the Stonega side, hauling in the necessary sawmills, boilers, etc., to saw wood to build houses, cutting stone by hand methods to support the foundations of our ovens, and at the same time opening up our mining seam, so I suppose
2919 there was actually some coal taken out for domestic purposes almost as soon as we began. We originally shipped coal from our plant down there to Chicago for steam purposes and for sale. All of that was shipped in system cars. (1539) We have engaged in the commercial business from the start and are continuing to do that in a smaller way as time goes on. In 1920 we sold commercially about 10,000 tons. I do not think we sent any coal at that time to our plant at Chicago. We sent it in the form of coke. The wrecks of about half of our coke ovens are still there. The other half we are still operating. We are shipping that coke to Chicago. We are using it in one of our blast furnaces that we occasionally operate. The number of tons of coke we ship per annum from these beehive ovens to Chicago depends largely upon the car supply. The product that we get now would run about 7,000 to 8,000 tons per month.
2920 (1540) We use coke racks for our own purposes, box cars if we can not get the coke racks. They are system cars. None of our private cars is applied to the transportation of coke. It runs six to eight thousand tons a month. The rest of the ovens are lying there. There is no dismantling of an oven. You just let it go to pieces. At the time of the conference with the Louisville & Nashville people and with certain of the Government officials I was engaged in war work in Washington. I was business advisor to the chairman of the war labor policies board in the Labor Department. (1541) I did not in that way come in contact with people who asked us to build these by-product ovens at Chicago. The president of the company to-day was working at that time as vice chairman of the War Industries Board, Mr. Alexander Lake, and he sent for me and told me that that matter had been approached to him and asked me to take it up, because I had more time than he had and I was in that end of the business. I said that in 1920 additional storage facilities were constructed, involving the expenditure of $500,000 or thereabouts. Those were storage and unloading facilities. The $125,000 referred to in the petition on page 4 is a serious error. (1542) We supply the People's Gas Light & Coke Company of Chicago from two to nine million cubic feet of gas per day under the new contract, as I recall. I don't think we have ever supplied up to the maximum of our contract. I know our average was about 5,000,000. We derive about 12,000 cubic feet of gas from a ton of this Benham coal. (1543) The number of cars we receive from both of our Benham mines is very varying, according to the ability that we have

in getting our own cars down there. We can not get anything but what we produce at the mine or what the railroads deliver at our mines. Our rating on the No. 1 mine is 55 cars and on the
2921 No. 2 mine 22 cars, I believe. That indicates our capacity. We have loaded out in excess of 102,000 tons—that is, we mined 102,000 tons, some of which was used in the beehive ovens. With respect to the gas, we use a lot of it in the operation of the by-product ovens, and we have use for some of the rest of it in our heating. (1544) 4,000 tons a day is our capacity from our operations. We have not been shipping that capacity. In 1921 we produced a total of about 800,000 tons. Out of that came what went into the beehive coke ovens. We produced in 1922 about 650,000 tons, and I think our 1923 production has been running about on the basis of 1921. We are using our private cars constantly. The purpose for which they were bought was to take care of us when we could not get system cars. In periods of car plenty there would be enough system cars, if the supply was regular right along, so that we got a continuous flow of fuel from one source of the right kind to operate these facilities in Chicago. (1545) We made no contract with the Louisville & Nashville with reference to the purchase of the private cars. I think both they and we knew that private cars were handled under established rules and regulations. There was no necessity of making any contract. I know of rules that have been established by the Louisville & Nashville with reference to handling of these private cars. I have seen copies of them. (1546) They publish them, I take it, for distribution. Those regulations are issued by officials to their own road. We have asked the officials what those regulations were in regard to the rights of our private cars on their line. That is the way I got my information. I do not know of any published regulations. (1547) If there is no transportation shortage, the Louisville & Nashville will deliver what cars come. Of course, the Louisville & Nashville is only responsible for the delivery of cars when they get them. They do not
2922 get them from our plant. They get them from the connecting line, the Big Four, or some other road. As to whether there is a proviso that if there is a transportation shortage other than cars we shall not get our full supply, the attorney for the Louisville & Nashville stated the rule here yesterday, and that was in accord with what I had learned from him as to their rule. We make a distinction between a car shortage and a transportation shortage. One is a public facility, and the other, the car supply, is divided between a public facility and a private facility. I understand the transportation is entirely a public facility. We are subject to the same rules as anybody else. If there is a shortage in motive power, terminal sidings, tracks, or congestion that would prevent moving the full quantity of cars that are available to be moved (1548) we share in the handicap or disability resulting from such shortage, and would be willing to continue to do so if we have to under the law. Un-

doubtedly our sharing in these transportation facilities resulted in our not getting a full supply of our private cars. To what extent our car supply has thus been diminished it is impossible to answer correctly or in detail. There is another side of that same situation that must be introduced at this point to show the full situation. If we should hold our cars back in Chicago for any reason, not unload them, not send them down along the line, even though there were full transportation facilities and full car supply, and we only got 20 cars there when we were entitled to 50, we would only get 20, and everybody else on the line would get their full supply.

By Director BARTEL (1549):

We began operating our cars late in the fall of 1920; really only since 1921.

2923 By Mr. LIVERIGHT:

As to whether we had 90 per cent service in 1920 out of our private cars, we did not, because we had not got them going. As to whether we enjoyed that much service in 1920, I cannot answer. I think that is a fairly close figure. We had what we call an adequate service. We don't expect a 100 per cent situation in anything that is exposed to climatic conditions and storm conditions and labor disturbances. We expect to get good results as contrasted to an otherwise poor result. We are human and reasonable about it. Out of the last 15 months ending with September, 1923, there were 11 months when there was less than 50 per cent car supply on the Louisville & Nashville, and we suffered at our mine, which depended on system cars, to that extent. (1550) At the same time I would think we were getting about 90 per cent of our cars at the [private-car mine] and without any damage to anybody else on the line. (1551) As to whether it is my understanding that the order of the commission intends to abolish private cars, I do not think they would attempt to burn them up, in that sense. I think that the result of the suspended rule would be to make the private ownership of them cease. By this order they are abolishing an existing right to utilize private cars in the form in which that right now exists, with the result, in our judgment, that it would make them unavailable as assets of a mining or operating company. We do not put any of our private cars into the mine that is served by the system cars. We use them exclusively at the other mine (1552) when that mine is an assigned car mine—that is, No. 2 was an assigned mine. The cost of production at the No. 2 mine is lower than that at the No. 1 mine. That is because it is a smaller mine and has not been developed a mile or two into the ground with all of the attendant facilities which we would have to depreciate, and it also works with the drain-
2924 age instead of against the drainage, which is a factor of some importance. We have much more unfavorable conditions at the No. 1 mine for cost, on account of the haul and drainage and the large overhead and the attendant investment in a large mine. With

respect to cost of production when we had no private cars at the No. 1 mine and since we have had them, we figure, under some conditions of labor, cost, and supplies, all of which enter into that (1553) and which are very variable factors, that we have made an appreciable reduction in the cost that would prevail under the interrupted car supply due to shortage of cars. I don't know how much per ton that amounted to. I don't think it was as much as a dollar a ton. To give an appropriate figure would be a long, difficult calculation because of the shifting cost of everything we use around the mine from month to month and shifting labor rates. It is a reduction worth saving. We are after the pennies in our business. The shuttle train service from the mines at Benham to Chicago means that the cars go up loaded and they are returned empty by the same route by which they went up, if possible. (1554) They go over the Louisville & Nashville and the Big Four to Chicago, and the Louisville & Nashville and Monon or the Pennsylvania to Toledo. Our general average experience, I would say, would be between 15 and 20 days as the turn-around of these cars. As to whether we get about two trips a month, 14 or 15 would figure about that. I think it runs between those two. The mileage per car runs a cent and a half per mile. The mileage from the mine to Chicago is, I think, about 572 or 562. (1555) The round trip would be 1,140 miles, roughly. If it took 17 days, the mileage per day would be a little less than 70 miles, including the empty movement.

2925 By Director BARTEL:

I am not deducting any time for the time of loading and unloading at the terminals. (1556.) As to unloading, they go and pull a string and the coal drops. The car has the ordinary shop handling of a steel plant. It would go out within 24 hours. We have at Louisville and at Cincinnati as great distributing points in the United States general agencies of the International Harvester Company, who are getting their supplies of twine and machinery of all kinds from our manufacturing plants in the north wherever they are located—Chicago, Auburn, New York, Milwaukee, and elsewhere. Those general offices of our company have a large traffic business, and we maintain traffic men who look after that southern transportation problem of the International Harvester Company and look after whatever transportation problems arise in connection with the movement of coal. (1557) We have got dozens of these traffic men in various parts of the country who look after our transportation requirements all over the United States. We ship, of course, to every State in the Union.

By Director BARTEL:

The mine at which we use our private cars is rated at 55 cars per day. We deliver cars to the Louisville & Nashville, and they take them and make up the trains. We do not. Whether they move in solid trains to our mine is entirely their matter.

By Mr. BOYD:

We own 499 private cars, to be exact, because one of them was damaged and paid for by the railroad a few weeks ago. Those cars are used exclusively in the movement of coal from our mines at Benham to Chicago and back again. They are not loaded by the railroads in the north, in the direction of the mines, if we know
2926 it. I am unable to state what our legal action would be if we found them so used, but my understanding is that we have a right to have those cars sent back empty, and we would so ask. It is generally understood among the carriers that privately owned cars are not to be used except in the service of the owner. That does not mean that they must go back empty, if the owner wants to load them. If he wants to load them, he can do so. It is our desire to obtain the maximum service from these privately owned cars. (1559) I have mentioned these traffic men. They do everything they can legally to facilitate the forwarding of our cars. As to whether in the event these cars have minor repairs that are necessary, and are held up, this traffic man sees that they are expedited, if he can, through the railroad people. I would think he would be negligent if he did not. Our Benham No. 2 mine is owned and operated on unassigned-system cars and has a rating of 22 cars per day. In the event on any given day we are not furnished with unassigned-system cars we will, as far as we can, fill our bins so as to be ready for the next day. The coal is not used in the coke ovens. The coke ovens are right alongside No. 1 plant (1560) which runs on privately owned cars. It is right in the same yard. Those two mines are located at Benham, Ky., within a short distance of the extreme end of the line. There is only one operation above us at present. The last tipple, irrespective of the tail tracks and other operating tracks they have above it, I would think, is a mile and a half; not over that. In serving our mines the longest haul from that field is required with the exception of that other operation on that branch (1561), the Harlan County branch, known as the Kentucky and Virginia Railroad branch of the Cumberland Valley division of the Louisville & Nashville. I have been over the railroad a good many times on days when I wished that I
2927 did not have to, but they have got it in pretty good shape now. It is a single-track railroad, with many other facilities than would be indicated by that statement. It is more limited than if they had double tracks going through the tunnels and all such things as that. It is limited by its capacity. (1565) I concede the right of any other operator in the Harlan district to operate privately owned cars if he so elects. If they so equip themselves and if they provide a definite sale of their product to a single point of delivery, I think that that would operate beautifully. If they bought cars they would have a right to ship them where they desire. But if we are to deal in things which would be perfectly absurd on that basis, we should put in private cars to our unassigned mine. We do not, because we know it is an impracticable proposition when the coal

is going all over the country. Other public-utility mines in that district shipping to a single destination would have just the same right and privilege that we have. (1566)

By Mr. GREEVER:

A case like ours where the cars move directly from the mine to one destination is the most practicable, and they become of the greatest utility under those conditions. The utility would vary with the conditions surrounding each case. As to whether they would be useful at all in general commercial business, I think they would be very useful if the retailer took a steady number of cars of coal regularly right along every day throughout the season and the railroad was willing to stand the loss on his cars for the sake of getting a steady delivery of a regular satisfactory type of coal to the customer that bought from him all the time.

2928 (1569) Our companies are regular incorporated companies, private corporations organized and doing business for profit. We bought these cars because we considered that they were essential to our stability of operation, and because somewhere along the process they would save us money or make us money. We bought them for the same reason we tried to buy good brains—to make us money. As to whether, if we have this facility and (1570) our neighboring operator has not, we have an advantage over him, when that line was opened up and the railroad was built there was not an operator on that line that was not aware of the conditions when he built his coal tipple and opened up his mine. He knew what he was facing. It is presumed that he built there because he thought he could make money. He took his own chances. The facility we have would be an advantage in our kind of business for our own business. We are not engaged in his business in the use of these cars. They are entirely outside of his business. If he is in the sort of business that I am in, then it is purely a question of his own judgment whether he is willing to lose a little money on the cars or not. (1571) I think it was wise for us to have private cars. I do not indicate at all what would be wise for him to do. I do not care to answer a question that I am unable to answer.

By Mr. CURRY (1572):

These cars were bought from the Standard Steel Car Company in May, 1920, but they were delivered the latter part of 1920, October and November. Since we have had these cars we have not been amply compensated through the one and one-half cent mileage paid by the railroads. (1573) We have lost money on them. When I made my report to the directors, asking for the appropriation for these cars, I stated that we could not expect to make a commercial return or any return upon them; that we would lose

2929 money on them figured as an independent, separate utility. That prophecy has proved true and will become more so as the cars get older. These cars are used continuously every day whether there is full car supply or not commercially on the Cumber-

land Valley division. The Louisville & Nashville does not want us to take any of the cars to our mine except our own cars. Our No. 1 mine has a rating of about 55 cars a day. The number of private cars we receive there varies very much. (1574) The average is less than 50 cars a day. I do not remember the exact number. I heard the testimony of Mr. Lunsford of the Fordson Coal Company concerning the practice of the Louisville & Nashville when there is a so-called locomotive shortage. I remember that our mine No. 1, our private car mine, has been put on a pro rata basis because of a locomotive shortage on the Louisville & Nashville. I think it was in about the middle of last year. Our cars were all thrown into the general pool and we went off the assigned car basis for a period. (1575) That was following the shopmen's strike. I don't remember how long that lasted. It was until it was agreeable to have them put back. As to whether we were circularized at that time as to the reason for putting us on that basis, I would not get any such circular. That would be handled by our traffic department. I might not know anything about it. I just happen to. The coking coal that is shipped from our mines on the Louisville & Nashville has varied. We have made some of our coke entirely from Benham coal, but I find that as a regular practice about 8 or 10 per cent of other coals is desirable. We get those in the Pocahontas district. (1576) We have no permanent contract. The amount is so small that we buy
2930 it from mines that we have examined and know have a suitable coal for our purposes for six months or a year at a time. I don't know whether those mines are in the district of the Norfolk & Western and the Chesapeake & Ohio. That coal is not moving in private cars. As to the total coal we need for all our plants every day, I can not give it in that way. We supply the steel mill coke requirements, with the exception of this 8 or 10 per cent of the total coal, from Benham entirely as far as the making of coke is concerned, and we use a few other cars of coal from Benham for other purposes around the plant. The nearest approximation I could make is that for the last three years (1577) our purchases from the producers of coal, other than our own interests for the Harvester Company plants in the United States Company, excluding our Canadian and European plants, has run about 275,000 tons a year. We buy the coal, other than the coal we take from our Benham mines, under contract or spot when we have to, because we can not get it from mines, which you might say are under our feet largely. The bulk of our operations are in Illinois and Indiana, and furnish practically all of our fuel supply for our operating plants, with the exception of a small amount which at times we can not furnish from Benham on account of the conditions. That would come from coal veins in the Pennsylvania field and would be melting coal that we use to melt the metal for making cast iron. I do not know of any of that coal that we buy from those adjacent mines that comes in private cars. It is so near that the problem is very much simplified. Those are partial output

contracts. They are just tonnage contracts. We can get coal that will suit us from innumerable mines that we can get along with all right (1578), because it does not involve metallurgical re-
2931 quirements, so that the necessity for the private cars does not extend to those mines. We have the additional advantage of having so many plants in Chicago that when one is long the other is short, and we can throw them back and forth. The problem is simple.

By Mr. BROWN:

I have testified that we did not get 50 private cars a day at this mine. Omitting what we use in our ovens at Benham and turn into coke and ship to Chicago in coke racks, we make in our by-product ovens at South Chicago from 30,000 to 35,000 tons of coke a month, and the recovery is about 66⅔ per cent, which would produce the amount of coal consumed in those ovens. In other words, there is one-third more coal consumed than we get coke, or one-half more. (1579)

Redirect examination by Mr. BROWDER:

With respect to Mr. Liveright's question concerning 90 per cent service, or something of the kind, out of those private cars, I answered it in the present tense. We did not get 90 per cent in 1922. As to unloading facilities at South Chicago, we have no facilities there to unload cars other than hopper bottom cars. We spent a large sum of money in providing a method of unloading which would fit these private cars. If we were thrown on to a miscellaneous supply, we would have to put in, for economical operation, a new and very much more expensive plant, probably costing at least a half a million dollars. With respect to the loading at No. 1 mine, I showed that the coal from that mine goes to the beehive ovens. To that extent the private cars are not supplied or used even where there is normal operation of all facilities to take care of that. (1580) The distance between mines No. 1 and 2 is half a mile or less in an
2932 air line across the sky.

By Mr. LIVERIGHT:

I do not know how much coal moved in private cars from our mine in 1922. (1583)

JOHN D. BATTLE, called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. ERNEST BALLARD:

I am traffic manager, National Coal Association, Southern Building, Washington, D. C., and have held that position about a year. Prior to that I was connected with this association for two years as assistant traffic manager. Prior to that time I had two years experience with the car service division of the American Railway Association and the United States Railroad Administration, and

rior to that time 14 years general railroad experience. (1584) My ailroad experience commenced as office boy and ended as chief clerk o the general superintendent. Practically all my experience was in he operating department. Immediately before being chief clerk o the general superintendent I was yard master for several years. The position of the National Coal Association on this rehearing is he same as on the original hearing in this case and is correctly tated in the commission's opinion about the middle of page 524.

Q. (By Mr. E. BALLARD.) Mr. Battle, on page 36 of the carriers' rehearing petition in this case, paragraph 22, this statement occurs:

"The commission is familiar with the action taken by the railroads of the United States, at their meetings in New York on April 5, looking toward the adoption and carrying out of a working program to enable them (1585) to meet the transportation de-
2933 mands of the country. That program has been fully explained to the commission in a hearing which has already been had in connection with Docket 14489. This program was hailed with enthusiasm by the entire country, with the exception of that inconsiderable minority that would like to see private operation fail. It was the purpose of railroad executives formulating this plan to spare no expense in improving the condition of equipment, in storing the greatest possible amount of coal, in endeavoring to equalize the movement of coal throughout the year, in increasing loading, and particularly in speeding up the movement of cars, which is the equivalent of adding largely to the equipment of the carriers."

Will you please state whether you have had access to the published reports of the carriers with respect to the progress made in carrying out that program?

A. I have. I have read them all.

I have them all before me and have made an extract of certain information from them with respect to cars, locomotives, and coal storage for filing in this case as an exhibit. (1586)

(The paper referred to was offered and received in evidence as Exhibit No. R-30.)

The information on this exhibit is all taken from the progress reports referred to, with the exception that the storage of coal in 1921, I believe, and 1922, is taken from exhibits already filed in this case. The 1923 figure shown for comparison is taken from the progress reports referred to. (1587) With respect to the sufficiency of open top equipment of railroads not originating coal, I have got together some information showing the tonnage of coal moved by representative carriers of that class, the amount of equipment owned by them, and the percentage of ownership on their lines from
2934 time to time during the last three years. The tonnage is all taken from the annual reports to the Interstate Commerce Commission and the ownership and percentage figures from the reports of the car service division, American Railway Association. All are public reports.

(Documents purporting to contain the information referred to were offered and received in evidence as Exhibit No. R–31.) (1588)

With respect to the period shown on this exhibit from January, 1920, to December, 1922, inclusive, there was a coal car shortage for practically all of 1920 and the last half of 1922. There have been local shortages even though there was no general shortage in the intermediate months. The conclusion I intend to be drawn from this exhibit is that either these non-coal producing roads do not own a sufficient number of coal cars or that during these car shortage periods they have not been returned to the coal producing roads as promptly as they should have been. I say that because of the large percentage of ownership shown on the rails of those roads who produce no coal or very little coal. (1589)

Cross-examination by Mr. FLETCHER (1589):

When I said that this Exhibit 31 may lead to the conclusion that some of the non-coal producing roads do not have a proper amount of equipment, that is based upon the idea that if they transport commercial coal, they should furnish some part of the equipment in proportion to their haul. The statement would not be true if it were sound railroad practice for the originating railroad to furnish the equipment. If it was determined positively that the originating carrier must furnish all the equipment required, of course, it
2934a would not be necessary. (1590) This exhibit does not refer to the roads that originate coals and does not show anything about their equipment. (1591) I stated that the attitude of the National Coal Association was the same as it was when the hearing was had before. That means that they are opposing the use of the railroad assigned car, but taking no position as to the private car. I can not say why they distinguish between the use of private cars and foreign railway fuel cars. I can only state that they do.

By Mr. ROPIQUET:

They distinguish only to the extent of not appearing on that question. They are divided.

By Mr. FLETCHER:

In so far as they gave me instructions, they have instructed me not to take a position in this case on that question. I have no position on that.

By Commissioner POTTER (1592):

I think the record shows that the tonnage represented by our association is something over 60 per cent of the commercial tonnage, soft coal only.

By Mr. FLETCHER:

That is about the same now as it was when that record was made. It may vary just a little bit from time to time.

By Mr. E. BALLARD: (1593)

t is a fact that the association is divided on the private car stion and that is the reason that its officials are permitted to take position. It would not be accurate to say that the association s neutral. They are not neutral.

By Commissioner POTTER:

Our association has not been instructed to oppose the use of private cars. I would not put it on that basis. The subject 35 has been discussed and we got no place, so they are divided; and as an association on a divided question like that we did t need any instructions. We have not been instructed to oppose e private car; we have been instructed to take no position.

By Mr. BAKER (1594):

I understand there is a very substantial tonnage of our association f so-called commercial coal in favor of the use of the private car nder the rule heretofore prevailing. By saying we represent 60 per ent of the commercial output, we mean the elimination of people ho do not sell coal, like the steel people, and the railroads who produce quite a bit of coal.

By Mr. FLETCHER:

The railroads take about 28 per cent of the total production of oal in the United States, but they do not produce that much. (1595) When I say 60 per cent I include coal which is produced and sold to ailroads other than that produced by the railroads themselves. We all that commercial coal. It is sold commercially to the railroads.

By Mr. E. BALLARD:

What are excluded are what are known as captive mines in the coal business.

WALTER D. MCKINNEY, called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. BROWN:

I am secretary of the Southern Ohio Coal Exchange. The purpose of my former testimony and exhibits was to show how the lack of car supply affected the distribution of the same as between mines loading railroad fuel and mines loading commercial coal. 2936 I desire now to present evidence respecting the effect of assigned cars on commercial car distribution in certain coal districts in the State of Ohio. (1599) I have prepared an exhibit illustrative of the situation as to car supply in the districts to which I referred in 1923.

(The statement referred to was offered and received in evidence as Exhibit No. R–32.)

This exhibit consists of five sheets and simply supplements an exhibit put in in the former hearing, only showing for the first three months of 1923 in practically the same manner as the former exhibit

did for 1920. This shows on page 1 a condensed statement of the coal car supply on the New York Central Lines, Corning, Drakes, Fultonham, and Kanawha and Michigan districts consolidated. (1600) The mines working on commercial coal or unassigned cars received 27.2 per cent of the car supply, while the mines working on assigned cars received 70.5 per cent, whereas if all of the cars had been distributed equally between the mines, there would have been an average of 34.3 per cent. This would have increased the cars to the commercial mines 7.1 per cent of the cars ordered, but would have increased the commercial loading, or the cars placed, by 26 per cent.

By Commissioner POTTER:

With respect to the assigned cars furnished on that first page, the coal is used for railroad fuel. In the event the railroads had not used assigned cars, they would have received 34.7 per cent. If they ordered 1,500 cars, they would receive only about 500 cars, providing, however, that they only ordered that number of cars. They would have had to order more cars from different mines. (1601) They could have protected their supply of coal by ordering from 2937 other mines than those from which they did. The mines from which they have ordered coal would have received 34 per cent. They would have simply had to place their orders with more mines. The only effect so far as the railway is concerned is to compel them to increase the number of mines from which they would buy coal, providing that they did not increase their car supply. If the aggregate number of cars available was the total number of cars that they could obtain, they would have been obliged to have placed their orders with more mines. According to this exhibit, if instead of having 70 per cent loading, the carriers had only 34 per cent, they would have been obliged to obtain about an equal amount of their coal from other mines.

(1602) As to whether if they had purchased their coal from other mines they would thereby have increased at all the amount of coal the other mines could have sold to outside industries, or whether the sole effect would be to require the railroads to take their coal from ten mines, say, instead of five, primarily that would be the effect, except my judgment, as expressed in my former testimony on that one subject, is that when the railroads suffer from lack of their own fuel they will compel their traffic department to cease from putting their cars into other service, and will take the cars from other service and put them into coal service. (1603) What this statement would show, of course, would be that the railroad would be obliged to take its supply out of the same number of cars that they received here. They would get the same coal. The same number of cars would have been in use and the car supply for the industrial consumers or the householder would not have been increased and the only effect would be to switch the railroads from mine A to mine

3. They would have to divide their fuel requirements among the different mines. (1604) Page 2 is the same information as
2938 to the Fultonham district which would show that the commercial loading would have increased 85 per cent. Page 3 is the same information for the Corning district, showing that the commercial loading would have increased 38.5 per cent. Page 4 shows the Drakes district and that the commercial loading would have increased 3 per cent and page 5 that the K. & M. district would have increased 10 per cent, all boiled down into one exhibit on page 1 as stated.

Cross-examination by Mr. FLETCHER:

This Exhibit 32 refers to the New York Central. That is the best illustration that we have, because that road is the one road that deals (1605) in railroad fuel to a much greater extent than any other road which we have. I mean by that that the New York Central gets a much greater proportion of its own railroad fuel in this particular territory but fuel for other roads. In this list of assigned cars I include not only fuel for the New York Central but fuel for other railroads secured in that territory. It is true that the greater the amount of railroad fuel taken in any particular district, the greater is the showing you can make of this character. I can illustrate that to this extent, that in 1918 for six weeks the New York Central had so much railroad fuel that we could not get a car of commercial coal off the line, when the people on the line were freezing. The sheets in this exhibit show quite a varying percentage. (1606) That depends upon the ratio of railroad fuel to the total. I have used the New York Central line instead of the Hocking, for instance. The Hocking furnishes but very little coal except its own. If I had taken the same figures on the Hocking Valley and they had abolished the assigned car rule, I would have shown a very small increase in the number of cars available
2939 for so-called commercial loading; just the same as I show here in the Drakes district, on page 4, where it only makes a difference of 3 per cent of cars placed and .7 of 1 per cent of cars ordered. (1607) I do not show the ratings here. The ratings of those mines would practically be the cars ordered. These are cars ordered. Ordinarily we order the rating in time of car shortage. (1608) Those are the ratings at that time. There have been no readjustments. As to whether they are twice as much as we can possibly produce, they are not. The inflation on the New York Central lines under the method by which they have kept their records is very, very slight. They base the ratings on the report as to the number of hours worked. I believe those reports are always made honestly by all the operators. We know that the New York Central lines have checked up and kept closer tab on that than any other system of which I have any knowledge. They police it carefully.

By Director BARTEL:

I show on page 2 of the exhibit that the increase in our unassigned cars for commercial loadings would be 85 per cent if the cars were all prorated equitably. Under the heading "Assigned cars" we have foreign railway fuel cars and New York Central, Ohio Central lines fuel cars. We have no assurance that if those cars were not classed as assigned cars from the foreign line or from the New York Central they would be in that particular district on that particular day. That might reduce our commercial percentage considerably. But in that connection the New York Central lines, unfortunately, with 1,788 cars of capacity, have shown that they could only
2940 move about 700 cars a day with their motive power. (1610)

I had not gone into the analysis of what would become of these cars and where they would come from. If we did not have the assigned cars in that particular district we might not have those particular cars to prorate, and it would not increase our commercial percentage 85 per cent. We have to take our equal chances with other districts. They may go to other districts, but also the cars in the other districts might come over there. (1611) It would be a matter of competition between the operators as to who would get those cars. We believe that they must go somewhere, and we would have just as good a show for those cars in our district as we do now. We would have to eliminate our foreign railway cars before we could prorate them, if the foreign railway should decide not to get its coal from this particular district.

By Commissioner POTTER:

On the 6th of January the New York Central ordered 1,503 cars and received 1,303, 70 per cent of their order. If they shared that with the others and received only 34, they would have received approximately 500, leaving 800 cars which they would have to obtain from other mines. (1612) There are about 200 other mines in these five districts. My theory is not that the extra cars should have been prorated among all of those mines. The railroads would buy their coal the same as any other large public utility or any large consumer of coal. They do not distribute their coal over all of the 200. As to the additional number of mines, the 800 cars would have had to be delivered to on January 6 to get the car supply, I suppose a dozen mines would have been glad to have had that coal. Other mines than that dozen would have been helped by the operation. It not only would help them in so far as that business is concerned (1613) but would reduce the cost of every ton of coal they produced instead of being increased as it is now. (1614) The mines that secured the business would have been aided, of course; that is all—not the mine that did not secure the business. The de-
2941 livery of these cars to 12 more mines than otherwise would be required would not necessarily add at all to the complexity or experience of operating the railroad. They would handle the same number of cars. If they did not handle railroad fuel they

would be handling commercial cars. I would not say that it is as simple and inexpensive to distribute cars among 24 mines and to pick up the loads as to distribute the same number to 6 or 8 or 10 mines. But those cars all had to be distributed among those mines. The trains have gone down distributing cars in the morning. They have gone from one end of the line to the other. They put in a car here (1615), 5 cars there, and 10 cars at another place, etc., right straight through.

By Mr. FLETCHER:

Concerning the week of January 6 referred to, the railroads distributed 1,303 cars for company fuel purposes. That was a time of severe car shortage. There was an active demand for coal. (1616) If the railroads had been imprudent and made no calculations whatever and had suddenly gone from assigned cars today to unassigned cars tomorrow, without any contracts, the same as other public utilities, the same as other large consumers of coal, they would have gone immediately onto the open market, with the effect that it would have increased the price of coal, as everyone would know what a thing of that kind would do. (1617) I would say that there necessarily would be a reasonable notice required of a change from the assigned to the unassigned basis, to prevent the disturbance of price conditions, whatever that time may be. No large consumer of coal would ever attempt to buy on a spot market unless he could take advantage of the spot market as the public utilities are largely doing today, and railroads themselves. (1618) This is a time of great depression in the coal market, because there is more coal to be obtained, and the are all buying it cheap. We know that the public utilities have laid in 5 or 6 months' sup-
2942 ply ahead, because they can buy their coal for less than it cost. I have the same objection to the use of assigned cars where the railroads take the output for a whole year, as where they take partial outputs. That is practically the same thing. In my opinion a railroad ought not to have the right to furnish cars to its own mine, and I object to that. I would object to a railroad setting aside cars, buying new cars and having them marked in some way so that they would never be put into the commercial trade, but simply be used as work cars to transport its coal from its own mines. I have no objection to any assigned cars so long as there is no unequal distribution. They can get any special cars they please, so long as they do not distribute them inequitably.

By Mr. F. BALLARD (1621):

There are no private cars in this exhibit so far as I know. There may be a few of the marked manufacturing company cars in there that I may have overlooked. (1622) They are a small part in the Fultonham district. As to whether the New York Central and its lines observe the Traer and Hocking Valley rule as to private cars, as far as that is concerned I think all of the railroads have ob-

served that rule in so far as they interpret it themselves. As to the column headed "assigned cars" and the number of private cars in that column, I spoke of the marked manufacturing company's probably having a small proportion in there. I could not tell how many. I did not make any investigation to determine it. These figures were given to me—because the railroad is so overwhelming there—they have a little line down in what we call the Redfield district that runs for about six or seven or eight miles between that and the plant in Zanesville. In so far as I have included privately owned cars in my computations I have assumed that those cars would remain available for distribution to others than their owners. (1624)

If it be assumed that there is a storage pile just as
2943 near the place where the railroad wants to use it as the geography will permit, but the coal has to be picked up by a steam shovel and put into a railroad car to get it to the fueling station, and is situated remote from the mines, the traffic department would handle that coal the same as they would handle your fluxing stone, or something of that kind. (1625) It has been removed from a mining situation and the railroad would handle it the same as it would handle any other commodity that it would have to pick up and move. As to assuming that the coal will have to be transported from the storage pile, we know [that among] the industrial plants, the Railway & Light, for instance, (1626) at Columbia, has six months' supply of coal right where it can be handled with its steam shovels or buckets, right into its plants, without the use of a solitary car. The use of the carrier's cars at the stock pile in the assumed case, has nothing to do with unequal distribution of cars among the mines. I would not complain of that.

By Mr. FLETCHER: (1627)

I believe wholly and solely that the coal car shortages that we have had have been by the use of coal cars by roads that do not own coal cars, in handling other commodities than coal. That has been proven, I believe, in the Fuel Administration, and Dr. Garfield in trying to distribute those cars found that when he made a preferential movement of coal the whole question was over; everybody requires coal. It doesn't make any difference who he is.

By Mr. F. BALLARD (1628):

With respect to differentiating between the assigned car placed at a company mine and the assigned (1629) car placed at a company storage pile, those in the coal business do not know anything about the abuse of the coal car when it does not go into the mining district. When it goes into the mining district there must be an equal distribution of cars. As to whether the only difference be-
2944 tween the two situations is the fact that in one case the Lord has stored the coal in the mine and in the other case [the Hocking Valley, for example], has stored it at Toledo, we in testifying before the Interstate Commerce Committee of the Senate showed

here the railroads were loading our coal cars to San Francisco with
utomobiles. We certainly object to the abuse of a coal car anywhere.
ut when the coal car gets into the coal district (1630) we know
here the discrimination is down there, when we have no knowledge
f the abuse of the coal car outside of the field.

By Mr. PUTNAM:

We are asking the railroads to furnish enough cars to take care of
he country's consumption of coal. If it be assumed that the total
ine ratings of the country total 200 per cent of the necessary pro-
uction to satisfy the consumption of the country, when the rail-
oads have the car supply which we would require, it would be im-
ossible at the start for them to give more than 50 per cent car
upply to the mines when all the mines were in operation. (1631)
As to how, assuming that to be true, I would suggest a method of
ontracting for coal, I could not, unless I knew the firm, the charac-
er of the coal they wanted to use, etc., but if I was buying the coal
would know. The question of a regular supply of coal of uniform
rade and quality in large volume was put up to the general man-
ger of the T. & O. C. Railroad on the assigned car proposition.
There are 200 mines on the road that are making the same character
f coal that he is using from the mines from which it is going out
ow. They could spread it over other mines more than they are
doing. (1632) Such contracts would be effective in times of car
hortage if they were distributed over enough mines. No large in-
dustry of any kind will put all of its eggs in one basket. As to
whether there would be any difference between contracting for 500,-
00 tons of coal a year from three mines and contracting for 500,000
tons of coal a year from 30 mines, if the car supply of those
2945 mines was going to be cut down to 50 per cent, I appreciate
that everyone would like to obtain his coal when he wants it,
as he wants it, and at the price that he wants to pay for it. That
s true everywhere. But I do know that the supply of coal for the
people of the United States must be supplied and if you give prefer-
nce to one over another, the other person has got to use some other
neans, either in price or otherwise, to get his coal. That is the best
nswer I can make to the question. (1633) As to whether under
such circumstances the buyer would be forced into the market to
buy 50 per cent of its coal on the spot market, he would not if there
was a full car supply, and would not within the meaning of a full
car supply as I have defined it. The inefficient mines would go out
of business so fast that you could not count them. As to whether
I have said that there would be a full car supply when there were
enough cars to move all the coal the country required and that could
be done on a 50 per cent car supply with all the mines operating, it
would start with 50 per cent on Monday and by the time you got
to Saturday you would be working a large part of the mines at 75
per cent, and by the time you went 30 days, 50 per cent of the mines

would be out of business, and the rest of them would be working 100 per cent.

By Mr. F. BALLARD: (1634)

I know that in the five war years referred to by the U. S. Coal Commission, the coal produced in the country averaged 516,000,000 tons. I handled 110,000,000 tons of it myself.

By Mr. ROPIEQUET: (1635)

Concerning the question that was asked me as to whether if 800 cars which the carrier got through a preferential supply were distributed among 12 mines, those mines would be the only ones who would be benefited, I said a dozen mines. It would have to be
2946 distributed among sufficient mines to keep up the proportion of the car supply. That would mean that there would be 800 cars that week for a pro rata distribution among all the mines. (1636) The larger percentage of coal that a mine takes out in a day the lower is the proportionate cost. If the public is dependent upon the mines with the larger cost, then the cost to the public would be increased by that method of distribution. It always has. (1637) We know that when we have a spot market as such with no cars, or very few cars, and everyone demanding coal, the pri[illegible] follows up the same as eggs and hits the ceiling: and if we have ample car supply under good contracts, the price goes to the bottom. The spot market goes up almost in the same proportion as the cost of the operator goes forward.

2947

2948 OCT. 31, 1923.

JOHN W. LIEB (1641), called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. WOLFF (1642):

I am vice president of the New York Edison Company, having more particular charge of the operations and administrative features of the business, and as a major factor in the allied electric companies of the Consolidated Gas Company of New York, have to do with the operation of the plants and the properties, including the purchase of coal for our allied group of electric interests. That includes the New York Edison Company, the United Electric Light & Power Company, the New York & Queens Electric Light & Power Company, the Westchester Lighting Company, the Yonkers Electric Light & Power Company, the Bronx Gas & Electric Company, and the Peekskill Light & Railroad Company. These companies furnish the requirements for electric current, for light and power purposes, in the Boroughs of Manhattan and the Bronx, Queens, and Westchester County. They furnish all of the power requirements and electric current required in those districts, including all of the manifold uses to which electric current is put. In addition to the ordinary services they operate the power houses and furnish electric current for traction purposes to the Hudson & Manhattan Railroad and the

(1643) Third Avenue Railroad, and they supply the energy for operating the western branch of the trunk line service of the New York, New Haven & Hartford Railroad. In addition they have emergency and breakdown connections with the Interborough Rapid Transit Company, the Brooklyn Rapid Transit Company and the Pennsylvania Railroad and the Brooklyn Edison Company. They furnish all the telegraph and telephone companies with the electrical energy they require for operating their businesses. They furnish the energy for the high pressure pumping service for New York
2949 City, as the lower part of the city south of 34th Street, I believe, is protected exclusively by high pressure pumping service, for which the energy is supplied from the power plants of the New York Edison Company. They furnish all of the street lighting service for the city in the Boroughs of Manhattan, the Bronx and Queens, Yonkers and in Westchester County generally; the police and fire department signalling systems; the lighting and power service required for the schools and hospitals, and all the municipal buildings; and all of the light and power that is required for the buildings of the Federal Government in New York City, including the post offices, customs house, appraisers stores, etc. (1644) A very essential part of their business is the service to some 56 plants for artificial ice making and refrigeration, almost all the ice making and refrigerating service in our metropolitan territory being furnished from electric power from this group of electric companies. They also furnish a very important element of public service in that section, the operation of electrical energy for the very large number of elevators required in the service of the important and high buildings. To get an idea of what that service means, the service supplied to elevators in the metropolitan district carries as many passengers per year, vertically at 100 per cent grade, as all the combined track systems in New York City, the Interborough, through its Rapid Transit Surface Railroad, and elevated systems included. The importance of that service to the public is very great, and any interference or interruption to that service for any length of time is unthinkable. The whole life and activities of the city, its health, and all industrial operations, are practically dependent upon the continuity of service rendered by that group of utility companies.
2950 There are a number of plants involved, including among others, (1645) the Waterside plants of the New York Edison Company, one with a capacity of 174,000 kilowatts; another, No. 2, with 152,200; the Hellgate power plant, with the present equipment of 150,000 kilowatts; the Sherman Creek plant, 151,000; and Kings Bridge plant, which is leased from the Third Avenue Railroad, 32,000 kilowatts; the Hudson & Manhattan plant, which is the operating plant for the Hudson & Manhattan Railroad, which we operate and furnish current to, 28,000 kilowatts; and the plants at New Rochelle, Duane Street, and five smaller plants, representing a total capacity of 720,000 kilowatts, approximately, or roughly 1,000,000 horsepower. The service in the metropolitan district is very dense.

Every street on Manhattan Island has electric service on one side or both sides of the street, and the service in Queens and in Westchester County is very general, representing a total of about 33,000,000 equivalent 50-watt units connected to the system. These companies operate under franchises, and are subject to regulation in a general way under the police powers of the State, by the State itself, through legislative enactment, and directly and continuously by public-service commissions. In the case of New York State, the public-service commission law (1646) is very general and very drastic, and enters into every phase of the company's operations. The maximum rate under which electric current is supplied on Manhattan Island comes under a general statute of the legislature of the State of New York fixing a maximum possible price for service as 10 cents per kilowatt hour, and fixing certain maximum prices which may not be exceeded for different units for street lighting. The jurisdiction of the public-service commission is complete as to rates, and they had fixed, several
2951 years ago, a maximum of eight cents per kilowatt hour, which was later reduced in successive stages to seven and a half and seven cents per kilowatt hour as the maximum rate which now prevails.

The regulations under which these companies operate make it necessary to furnish a very exacting service, permitting of no interruption, as far as human foresight can provide against. For instance, the service to the fire supply, high-pressure pumping system in New York, provides a very heavy penalty in the contract with the city for every minute's interruption to the service; and the service required by telephone and telegraph companies is very exacting, allowing no deviation from a standard pressure, standard voltage delivered to the lamps (1647) and to the motors, so that the service must be continuous and of a very constant character to give the service required. We estimate that in the territory that I have mentioned as covered by this group of utilities, there are some 630 square miles, the part in New York City itself, the greater city, being 175 square miles, and representing a population of roughly four million inhabitants. The energy supplied represents approximately, during 1922, 1,662,000,000 kilowatt hours, and the maximum load carried was roughly 523,000 kilowatts. The coal consumption of those united services, grouped as I have indicated, represents an annual consumption of roughly 1,500,000 gross tons. One feature of the utility service under the New York State laws, which affects this general problem of continuity of service and the relations of the coal supply to that service, is the fact that it is impossible to raise the rates on the part of any of the public utility companies without application to the public service commission, requiring usually exhaustive (1648) hearings and presentation of evidence, so that from the time when the business of the company will require increased revenue due to increased expenses from increased source of coal or otherwise, to the ability to pass that increase or the new rates on

to the consumers, there is usually a very considerable
2952 lapse of time. We are therefore, as public utilities, in a different position from the ordinary merchant who may, with his increased cost, increase the cost of his merchandise with relative promptitude, whereas in the case of the utilities there is a considerable lapse of time, and it is quite possible that from the time application is made for increased rates to the time they are incorporated in the price to the consumer, such a considerable time may have elapsed that the increases no longer serve the purpose for which they may be indicated. An important phase of that increase that was required developed shortly after the war. During the war period it was possible for the companies to come through without applying to the commission for any increase of their base rate which, as I have stated, is 7 cents per kilowatt hour. But after the war period there was a slight increase made through a coal adjustment (1649) clause which, however, was applied at that time only to our high tension customers, and had a limited application. But in 1920 an application was made to the commission for permission to introduce what is known as a coal adjustment clause. When the rates were established on the basis indicated, of 7 cents maximum, per kilowatt hour, the cost of coal to that group of companies was roughly $3 a gross ton, f. o. b. New York Harbor. In 1920, with the mounting coal cost, it was no longer practicable to come through with the 7 cent rate, and an application was made to the public service commission to be permitted to introduce a coal adjustment clause representing the increased cost of coal alone, f. o. b. New York Harbor. That did not include any increase in cost of labor or supplies, or maintenance in the power station, and it did not include such additional costs of coal as increased harbor and boating charges, increased expenses for storage or increased maintenance of boilers and furnaces. It represented merely the increased cost to the company of coal f. o. b. New York Harbor. That clause became effective on December 1st, 1920.

Under its operations an additional amount was produced
2953 through its operation at first—and that is (1650) the maximum additional amount attained—of nine-tenths of a cent a kilowatt hour, making for a short period the maximum rate, including the coal adjustment charge, of 7.9 cents, with a sliding scale which decreased as the cost of coal to the company decreased, until now the additional element added to our bills as a separate item, specifically indicated as a coal adjustment charge, is roughly somewhat less than one-half a cent. In order to apply that coal adjustment clause to our consumers, we are under obligation to file each month with the public service commission a sworn statement as to what the average cost of coal has been during the preceding month, and this coal adjustment clause becomes effective in the following month. As an example of that filing, which is a filing as railway tariffs are filed, it is filed with the commission, and is on file in the official rate filing schedules at each one of the companies' offices, and therefore available to the

public. The statement conveys the information that the average cost of coal for the month of September, for instance, 1923, to the New York Edison Company, was $6.887 per net ton f. o. b. New York Harbor. Therefore the coal adjustment charge for the month of November, 1923, becomes (1651) forty-eight hundredths of a cent per kilowatt hour for bills rendered for low tension service and thirty-six hundredths of a cent on bills rendered for high tension service. The cost of coal is an important item in the cost of generating electricity, varying roughly from 65 to 75 per cent of the operating cost of generating electricity on the switchboards of the high tension stations. Under pre-war conditions it was about 66 per cent, and the coal item alone represented during 1922 and 1923, 68 per cent of the total cost in the power stations of producing current as delivered to the switchboard. In the case of high tension customers, however, the item of coal alone, in its importance and cost to the company, represents approximately one half of the total price of high tension current as delivered to the high tension consumers.

2954 Some exception was raised by the municipal authorities in the application of this coal adjustment charge, due to a variation of coal prices which I shall speak about specifically later, but the case was tried out in the courts and was pronounced by the courts as a reasonably necessary and proper method for the company to recoup itself for the additional cost of coal, unless a definite (1652) and permanent advance in the base rate were permitted, which seemed undesirable, as the coal adjusted charge was flexible and as the coal cost came down the customers would get the benefit of the reduced cost of coal to the companies. The company usually places its contracts with the beginning of the coal year, and invites bids from operators that have the necessary responsibility and necessary facilities in our judgment for supplying the needs of the company. It is distributed to the coal operators. Under ordinary conditions the company does not operate through jobbers or middlemen, but prefers to deal directly with the operators. In some cases, as many as eight or ten operators may be supplying the company. Under the present contracts of this year the supply to the company is divided between three operators, one supplying an annual requirement of 300,000 tons, another 500,000, and another 676,000 tons, making a total for the contract year ending March 31, 1924, of a requirement of 1,476,000 tons, or for the electric company one and a half millions tons. Those are gross tons. The requirements for this group of companies run (1653) about this way. In 1919 they required 1,041,968 tons; in 1920, 1,185,266; in 1921, 1,316,320; in 1922, 1,367,505; and we estimate that the requirements this year will be roughly one and a half million tons. The coal, as supplied from these three sources with whom we have contracts, comes, in the one case, from the originating region in central Pennsylvania, railroad routing being over the C. & I., the New York Central, and the P. &

R., to Port Reading, and then by boat, in barges to our waterside stations, our Shadyside storage yards, and our Sherman Creek station.

2955 Another source is in central Pennsylvania. Our rail routing is over the Pennsylvania Railroad, Jersey City, to our waterside stations. From the Pocahontas field the rail routing is over the Norfolk & Western to Lamberts Point, thence via seagoing vessels to our station at Hellgate, where there is a sufficient draft of water to permit the landing of coal boats of 6,000 to 8,000 tons. That coal that we obtain must be of a rather particular quality, and the plants and equipment, as regards boilers, firing systems, stokers, arrangement for draft, and balanced draft system and control, make it necessary to impose rather strict limitations as to the quality of coal which can be satisfactorily burned under those conditions. (1654) Our usual specifications require an ash content within six to eight per cent, fusibility of ash in the neighborhood of 2,400 degrees, a definite specification as to the British thermal units, and any marked deviation from those specifications is very likely to give us trouble, causing increased consumption and interference with our operations, maladjustment of draft, and other boiler or furnace conditions; and if the coal has a low fusibility of ash, it is apt to very seriously interfere with our operations in slagging grates and reducing our capacity to do business. It is not only a question, in general, of adaptation to a given grade of coal, or to a limited number of grades falling within those specifications, but a variation of the product from day to day is apt to give us trouble and seriously affect our economies. The effect of undesirable coal, which has appeared in some years, where the delivery of coal under our regular yearly standard contracts has been inadequate, and where it has been necessary to go out in the open market and buy spot coal, is very serious. A few figures might be indicative of the necessity of a very regular and constant quantity of coal, and I might state that there

2956 is a very great reduction in the heating value and (1654) economic value to us of coal due to poor preparation. We estimate that with a normal preparation, the ash, representing, say, 5 to 6 per cent, and not to exceed 7½ or 8 per cent of ash, if we should undertake to try to burn coal with as much as 21 per cent ash the value of that coal is reduce to us. Its economic value is reduced to us one half. When you get to a coal that has a percentage of ash considerably greater than 21 per cent the time rapidly approaches when it practically has zero value to us. Roughly, therefore, with a good preparation and normal value of ash, we might have an economic value, say, of three. The relation of coal with 21 per cent of ash would be practically only a value of three-fifths, and, as stated, the value of high ash coal seriously reduces our boiler capacity; but among the other serious consequences is that the transportation of this high ash coal and the

poorly prepared coal, as experience in some of the spot coal, represents an enormously increased requirement of railroad transportation for transporting slate, coal, dirt, car couplers, and any old thing under the name of coal, and seriously taking up railroad transportation for a useless commodity. In addition to the impairment of value due to poor preparation or poor adaptation of coal to our requirements (1656), taking up a very large measure of railroad transportation, we also find it necessary to have a rather constant and dependable quality of coal, depending upon a condition that is in a way peculiar to New York. New York City is affected—I may say afflicted—with very violent thunderstorms during the summer, sent over to us from our friends in Jersey across the Orange Mountains, and which, within the lapse of a few minutes, 10 or 15 or 20 minutes, may increase enormously the demand for current, and the day is turned into night. Everybody jumps for the button to turn on the light. Street signs are lighted up, and we have an enormous increase that comes very suddenly. We have to meet that increase or our service goes down. In order to meet that increase it is necessary to have a grade of coal
2957 which is responsive to that sudden demand and which can stand the forcing necessary to meet that very sudden demand, which sometimes sticks on for several hours, but more usually after fifteen minutes to half an hour it declines as rapidly as it came on. That is a peculiarity which our local conditions there require us to meet, and require a dependable quality of coal. Otherwise our service becomes impaired.

Our own experience is that the chemical analysis, compliance with the mere outline of specification, does not fill the bill. (1657) Our experience indicates that the important chemical constituencies, by volume of weight, of volatile, fixed carbon, sulphur, etc., do not tell the story; so it is necessary for us, before contracting for the coal, to test it on an operating scale, actually on the grates and under the conditions we use it, and while the coal is being delivered under the contracts we have a continual process of sampling, so that we have a detailed record of a number of analyses from every bit of coal as it is delivered to our power plants. This variability of demand which comes to us from customers is not only from what we consider our regular customers, but we have a very large number of so-called breakdown connections. Customers with isolated plants that are less responsive to sudden demand have a breakdown connection with us so that they can switch over from their own plant and put it up to us to carry the load. That is of significance not merely under emergency conditions, but just as soon as the coal conditions become bad and coal becomes scare and high in price, all those plants simply switch over to us, and, to use a slang phrase, "Let George do it," and we have to carry the load, which makes it rather difficult and makes the service exacting. (1658) As stated, we have to be rather careful in selecting the people with whom we

contract. With regard to the question of provision of storage capacity, we have two large plants for storing coal, both of them being removed from our power plants. Usually we have a local storage to tide us over from day to day, in the plants themselves;
2958 but we have a coal storage yard located at Shadyside, at Edgewater, N. J., about opposite Grant's Tomb on the waterfront, to which we barge coal from the delivery ports, and where we have storage for roughly 200,000 tons of coal. This is a photograph of that coal storage plant. We have found from our experience that notwithstanding the provisions that we make in the selection of operators with ample facilities and responsibilities, we must have a considerable storage, and our storage of coal and the reserve that we have, which we do not like to touch except in case of an emergency, represented on April 1st, 1918, as little as 60,000 tons (1659): October 1, 180,954; April 1, 1919, 110,513; October 1, 139,000; April 1, 1920, 48,164, which we consider a dangerously low margin; October 1, 1920, 132,897; April 1, 1921, 222,541; October 1, 1921, 169,649; April 1, 1922, 259,643; October 1, 1922, 150,735; April 1, 1923, 207,804; and the last figure which we have, October 1, 1923, 221,315. A part of that storage capacity is storage capacity at the works of the Astoria Light, Heat & Power Company of the Consolidated Gas Company, with whom we share at Astoria, near Hellgate, a very extensive coal storage equipment, where there is available a coal storage capacity for the use of the electric companies of roughly between two and three hundred thousand tons. As to our experience as to the cost of that storage, at the Edgewater plant, at Shadyside, N. J., the investment in land and buildings and equipment is roughly about $1,100,000. If we consider the value of the coal carried in storage, and put that as 175,000 tons, if we consider the interest on the investment in land, property and coal there (1660), and taxes, the interest being placed at 8 per cent per annum, the cost, from an investment point alone of storage of a ton of coal at that particular location is $1.31 a ton. Our maintenance and operating costs during the year 1922 at that plaint were $159,807, and, taking the cost
2959 of storing coal, in and out, to an amount of roughly 145,000 tons, it represents a cost to us of one operation, in and out, of $1.10, or a total cost of storing coal at that plant, including all costs, once in and out, of $2.41 a ton. If we move the coal twice per year, it would be $1.75 per ton. This does not include any calculation for loss due to weathering, or spontaneous combustion, fire in the coal piles, which is more or less a chronic condition, but it represents the bare cost to us. These details of storing coal, to make up for fluctuating deliveries, freezing up of the harbor, freezing of the coal in the cars at the terminal points, and interruptions of transportation due to interference by weather conditions or otherwise with the carrier's delivery, strikes, etc., make it, in our judgment, imperative that we should have always in storage, to guarantee our service to the public there, a minimum of 60 to at least

90 days. (1661) In addition to this coal storage it is necessary for us to provide insurance, and strictly for insurance purposes, to guarantee us against interference of all kinds, particularly failure of plant and apparatus. We have an investment in storage batteries, which we never use except in cases of emergency, and which we treat as a purely insurance proposition, some $4,500,000, not including the value of structures, spread in 53 storage batteries throughout the system, and enabling us to carry 60,000 kilowatts, or 80,000 horsepower of energy for one hour, as a protection against emergency.

The photograph referred to was offered and received in evidence as Exhibit R–33.

(1662) As to our experience under priority orders, the period for which I have a record before me covers the period under priority orders from this commission, from July 15th to October 15, 1920. During that period, through this commission, inspected and approved by the local public service commission, there were issued priority orders for, roughly, 603 cars per week. The maximum number of cars shipped in any week under such priority
2960 orders from the commission was 552, or 92 per cent of the requests for priority. The maximum [sic] number of cars shipped in any week, for a demand of 603 cars, was 228 cars, or 38 per cent.

By Director BARTEL:

The commission in that year did not issue priorities for any given number of cars. Our application to the commission for priority covered what we considered a necessity, 603 cars, and we got a maximum of 552 out of that 603, or a minimum of 228. As to whether we were authorized, under the commission's priority orders (1663), to have cars assigned for public utilities during that period, without coming to the commission specifically for any number of cars, my answer is, "No." We had not only to ask for a specific number of cars, but under affidavit and under control by the public service commission for a certain period, we had to make affidavit that this number of cars was required, that it was all required for current consumption, and none for storage. The experience under these priority orders was that we received roughly 71.9 per cent of the cars for which we made application, and if it had not been for that very valid and effective assistance rendered us under those priority orders, and for which we are duly grateful, we would have been down and out. These figures will show that. In six weeks immediately prior to the effective date of the priority orders, when the same number of cars per week was on order, there were shipped an average per week of only 244 cars, so that we got, prior to the effective date of the priority orders, only 40 per cent of our requirements, whereas under the commission's jurisdiction, with assigned cars under priority orders, as stated before, we got roughly 72 per cent. In the two weeks following the close of the period during which priority orders

were (1664) effective, the average number of cars shipped per week, against the same orders, was 352 cars, or 58 per cent. Some of
2961 our coal was delivered through contractors who had private cars. For them no priority was asked. The maximum number of cars shipped by contractors with private cars, for whom no priority was asked during that period, was 120 per cent of the requirements. The minimum number of cars shipped by contractors with private cars was 61½ per cent. During that period our average number of cars from those contractors having private cars was 110 per cent. In the six weeks immediately prior to the effective date of priority orders, under these private car shipments, there was an average of 77.7 per cent, and the two weeks immediately following the close of the priority period there was shipped to us, with private cars, without priority, an average of roughly 91 per cent. The first experience of the New York Edison Company with assigned cars was July 15 to October 15, 1920, the period that I have indicated, when cars were assigned by railroads on application of the New York Edison Company, approved by the shipper. (1665) Later, an approval of the Interstate Commerce Commission, through its representative in New York, was required, and still later also additional approval of the local public service commission. During that period assigned cars under priority orders were extremely helpful, and without such effective cooperation on the part of the Interstate Commerce Commission we would have been in very serious difficulties. In August, 1922, during the coal strike, the New York Edison Company made application to the fuel authorities to be placed in the priority class. The application was not approved for the reason that, in the judgment of these authorities, its coal on hand was not sufficiently low to justify their interposition. Therefore it was evident to use that there was a difference of attitude or point of view between the authorities and ourselves as to what constituted a proper storage reserve. It was evident that the authorities having this matter in charge did not realize the relation that the storage
2962 requirements of very large consumers in the public service should bear to their consumption, nor how much more difficult it was to obtain the right kind of coal during (1666) periods of stress.

Roughly, we find that our company receives about one-third of its total requirements through the operation of and delivery through private cars. I need not again emphasize the necessity to us of a continuous supply of the exact quality, within close limits, that is needed in the conduct of our business. During times of coal stress, which results from various factors, in which poor car supply certainly is a contributing element, we have averaged, for periods of months at a time, as low as 30 to 40 per cent only of the total amount that we had under contract. As to what happens under those conditions, in 1920 our contract deliveries under our regular contracts, partly to restore the depleted storage and the lack of accumulation

of the previous years, was 1,589,790 tons. The average cost of that coal to us f. o. b. New York Harbor was $7.22 a ton. In order to cover our requirements and protect ourselves against shortage, we had to go in the open market and purchase in that year 316,844 tons of spot coal, in the open market (1667) for which we paid as much as $17.94 maximum, f. o. b. New York Harbor, and an average cost for that spot coal of $10.12 a ton, as against $7.22 under our regular contracts. In 1922 our deliveries under contracts were 1,521,369, which was purchased at an average cost f. o. b. harbor of $6.70, and we purchased in the open market 288,628 tons of spot coal, at a maximum price of $10.52 per ton, and an average price of $8.03 per ton, as against $6.70 for contract coal; and in this 288,623 tons purchased in the open market, spot coal, 57,100 tons was imported Welsh coal, which enters into the calculation to the extent of $9.92, an average cost.

We wish to emphasize the absolute dependence, in the metropolitan conditions, of the life, health, and industries and community activities on the constant and uninterrupted supply of electricity. These plants are likely to play an important part in the conserva-
2963 tion of our natural resources, because these plants, in their expansion, are displacing and taking the place in the picture of conservation of (1668) a large number of isolated private plants, small and inefficient noncondensing plants that use two and three and four times the amount of coal per unit generated that we use in these superpower plants, but that makes our conditions of service all the more exacting, makes our ability to supply all the demands of our communities more serious, because those plants, operating in the center of the city, take up transportation facilities, haulage facilities for coal and ashes, and they cause interference with delivery to the private plants during days of storm when the streets become impassable, so that we estimate that our function in New York in conducting this business of supplying all the requirements, including the private plants, represents a saving of roughly 1,000,000 tons of coal per year. To show the tendency of this economic concentration, we are displacing, on the average, about 100 private plants per year, and assuming the service which they formerly conducted locally. It in this concentration in these large public utility plants, and their interconnection so as to take advantage of the diversity factor that exists between them, that is the important phase of our national economics. We in the utility business firmly believe that the availability of a constant supply of electric power at (1669) reasonable rates is the very keystone of our industrial supremacy, and therefore we have the obligation to spare no means to safeguard that service; and the very foundation stone of that is a constant and regular and dependable supply of coal of the proper characteristics. Roughly the value of the service furnished by our companies, as interpreted in our income and our revenue from that service, is as follows: In 1923, we estimate that the revenues of these electric companies will

e in advance of $60,000,000, possibly between $60,000,000 and $65,000,000, confining it to the electric companies alone.

2964 Cross examination by Mr. BROWN:

As to private cars we have contracts with Berwind-White, among others. We have contracts with the Pocahontas Company and with J. H. Weaver & Company, and those three companies (1670) make up the three sources with whom we have contracts for this year. I did not say we had any private cars from the Pocahontas field. There are no private car interests we had contracts with except Berwind-White. They supply, roughly, one-third of our requirements. The storage where we have deep water is the storage plant which we have in common with the Consolidated Gas Company at Astoria, Long Island. The coal that we use at that storage plant all moves in by water. (1671) Coal moves to our storage plants by barging, except the coal received at one of our largest plants, the Hellgate station, where we have 32 feet of water, and which is immediately available for seagoing vessels of six to eight thousand tons, and there we get delivery right from Hampton Roads to the power plant dock. As to whether there are assigned cars to tidewater from the Pocahontas region, I don't know anything about the railroad movement. We do not buy coal from England or other foreign countries every year. This has been an exceptional emergency, and I know of only one case, some fifteen or twenty years ago, when we bought a consignment of coal, but we depend entirely on local supply; and this was among the first times, in recent years, when we have bought foreign coal. (1672) I said in round numbers that we had on the first of October this year, 226,315 tons in storage. That includes all storage except the storage at the local plants. We do not call coal that happens to be in the bunkers of the plant as a part of our storage. That is part of the commodity in the works, as it were; 226,000 would be about one-sixth of our requirements. We aim to keep one-sixth of our requirements in storage, as a minimum. It goes above that at times. We should like to have more than that. We should like to have a mini-

2965 mum of 90 days; a three months' supply or a hundred days, with a minimum of 60 days or two months. Ninety days or three months, I think would be an adequate provision under (1673) our conditions. From the orders of the commission in this case I take it that they intended to make a limitation in the use of private cars. Speaking of coal exclusively as a consumer, engaged in the service of a public interest, I believe that until some other arrangements have been perfected which will give us equal service that we have been getting in times of stress, we should be allowed to continue to receive coal as we have been receiving it, under present conditions. As to what effect unequal (1674) distribution of cars to coal mines has upon coal prices generally in this country, I have only a general opinion, from general information, and I

should not attempt to testify as an expert on that question. Since 1915 and even before that, there has been a tendency in the direction of increased prices for coal, but it has not been constant. It has fluctuated, following the laws of supply and demand. At the present time it is downward. How much the increased cost of coal is due to the labor cost, I can not testify as an expert. I do not undertake to express any opinion as to coal mining operation (1675) or transportation arrangements. My knowledge is only of a general character, and not from specific knowledge. I believe that it is economic, as far as we are concerned, and the public interests that we serve, that we should have a constant supply of coal, whether it be in private cars or system cars of the railroads. That is an economic necessity and a fundamental one. Whether it is as great an economic necessity for the country as a whole, that the price that the consumer pays for the coal should be reasonable and just, is a question of national economics that I should not feel adequate to express an opinion upon without much more detailed knowledge of the general conditions of mining and the industry generally, than I possess.

2966 (1676) Coal containing 10 per cent ash would not satisfy our requirements. Some other people could use it. We cannot. I did not say that we had received any specific consignments of coal of 21 per cent ash, although that might well have been the case. I indicated as to what would happen if we had to receive coal with 20 or 21 per cent of ash. I do not know of any specific consignment that I could testify about, but I am very sure that some of our coal had 20 per cent of ash and perhaps more. (1677) We bought what the other fellow said was coal, but when we got it we found that it was not, except that it was black. It was dirt.

By Mr. LIVERIGHT:

I understand that in 1920 conditions of transportation were extraordinary, and our requirement for priority orders as a result thereof, was an exceptional situation. I understand that in 1922, conditions were extraordinary as a result of the strike, and our needs on that occasion were also exceptional. (1678) I think if we were assured of a constant, regular delivery of coal, such as we consume, and as would be the case if we had 100 per cent car supply from the railroads, then we should not have to be dependent, and should have infinitely less interest in this question of private cars. As to whether we would call for 100 per cent with a 90 days' storage, we would. We would not consider that 80 or 85 per cent service is sufficient service to us. We want to be able to keep that 60 days' supply there—move it, it is true, which we would have to do in order to keep down spontaneous combustion of the coal pile, but we should not want to have any 85 per cent supply continue over any considerable period of time. What the storage is for is to take up the fluctuation in coal supply, but that is predicated on what you might consider a short time. (1679) If the railroads had plenty of cars

at their disposal, we should not feel that we had to place any
2967 dependence on private cars. In other words, private cars, as such, is not a matter that we, as consumers on the consuming end, are particularly interested in. What we are interested in is getting out the coal. If the railroads perform their obligations fully, I do not insist on the use of private cars; if their obligations are of the character that I indicate, and we got our coal, including the emergency days, because, under normal conditions we are entirely satisfied with the operation of them. As to how many years we got along without the use of private cars for our coal, it would be rather difficult for me to answer. (1680) The past history would indicate that we got along for quite a period of years until an emergency arose. Our own conditions or demands and requirements have very materially changed in the interim, both as to the quality of coal and as to the quantity that we use, of course. We got along for a considerable period. There was a time we practically did not use any bituminous coal. A very large part of our consumption was stock sizes of anthracite. Conditions in New York are quite a little different from those in any other great city. In the first place, the very rapid increase of our load during the (1681) summer time, which is of such character that sometimes in the middle of June or July or August, we are apt to get a load which is just as great as the maximum load of the previous winter, due to thunder storms and due to our geographical location. Thunder storms are not common in other large cities to the extent that we are called upon to furnish breakdown service, for instance, to plants all over the city who are caught, and throw over to us. Our conditions are quite exceptional. (1682) I am speaking of break-down service to our own consumer; the inter-connection linking up plants between neighboring utilities is another problem. Other large public utilities do not have breakdowns among their consumers that are anything like it is with us, because in other cities there is not prevalent anything like the large number of buildings of the size which may have induced, or still would
2968 induce the private consumer to put in an isolated or private plant. That condition is quite exceptional in New York City. I am reasonably familiar with the cities of Chicago, Boston, and Detroit. I know that the percentage of break-downs they have is nothing like what we have. That percentage is roughly not one-half or one-third, or possibly one-fourth, based on (1683) general knowlegde and information. That is my business to be informed of what the status of the industry is. We have a contract with our consumers which, as regards this coal adjustment charge, rises and falls with the additional cost of coal that we have to pay, over and above the normal cost. The cost that we submit to the commission has nothing to do with storage. (1864) Any cost that we are put to for storage is covered in the base rate when it is made. The last base rate was, I think, in 1917 and 1918, the last drop from 7½ to 7 cents, what it is now. I do not think as much cost was then involved in storage

as is involved to-day. The cost of harbor haulage, the cost of maintenance of the plant, the cost of labor at the plant, everything that is incidental to the operation of a coal-storage plant has increased over what it was under pre-war conditions. (1685) That additional cost of storage over the total tonnage of coal we use, would be of relatively minor importance, and certainly could not be the basis of any application for an increased base rate. We would not go to them, unless we were in the necessity of going to them for an increased rate, that being unpopular, we should not go to them unless it were for a worthwhile thing that really affected the business standing of the company. I would say if the storage cost were spread over the whole body of coal, it might reduce itself to something on the order of 25 or 30 cents a ton. I am just guessing now. It would be something on that order. (1686) As to why there should be a difference between our storage costs and storage costs of the Detroit Edison Company, everything is higher in New York. (1687) This plant that I am speaking of was a storage plant that we have had in use for something
2969 like 12 or 15 years. If we were to build a new plant, that is another question. I assume with a modern plant, our storage charges might be considerably reduced, as they are reduced in the part of the storage that (1688) we occupy in conjunction with the Consolidated Gas Company of New York. Mr. Addicks has charge of that plant for the Consolidated Gas Company. We gave Berwind this particular contract under which we are operating, in January or February, 1923, I think. He had been supplying us coal prior to that, for years. In what kind of cars I don't know, but I assume in private cars. (1689) I couldn't tell when we first resorted to private cars for our coal supply. As we have had contracts with Berwind-White for years, I assume that the use of private cars began when Berwind-White had them. I don't think that getting coal in private cars reduces the cost per ton to us. The Berwind coal that we are getting is not the same coal as the coal we are buying from J. H. Weaver Co. They are not directly comparable. The price of coal from Berwind-White, when the contract was made, was slightly in advance of the Weaver price. It is very very notably lower than the Weaver price at this moment. We had a sliding scale contract with the Berwind-White, not with the Weaver. (1690) Our contracts with the Berwind-White Company were an adjustment to the price which might be made with an increase or decrease of mining rates or transportation rates, their contract with us being f. o. b. plant delivery. I cannot answer as to whether there has been any change either in mine costs or in the freight transportation costs since this contract was effected, but that contract with the Berwind-White Company included another clause that they would make such adjustments from time to time as their own cost would make practicable. We had a fall clause, instead of a rise and fall clause, except in so far as it had to do with transportation or mining rates. This coal has been brought down now so that it is very notably below the firm contract price that we have with

Weaver. (1691) I don't know the exact figure. That
2970 price is during the life of the contract. We are bound to get a lower price from Berwind—up until April, 1924, with the right to call of them to further lower the price if conditions at their mines warrant it between now and April 1st. But it has usually been the case that they make those reductions voluntarily. We get from Weaver in the central Pennsylvania district, roughly 350,000 tons. 300,000 tons, our contract covers. It is a good contract, and if Weaver should (1692) not see fit to lower the price, we would live up to it. He has declined to lower it to meet the Berwind competition. Our requirements for coal are not merely for the ordinary average steam coal product. They are specific, particularly as to the grade of coal, by analysis, specified in the contract, and its compliance also with the samples that had been theretofore tested before making the contract. We have difficulty in getting contracts for coal with an ash content as low as 6 per cent, in our market. We leave a spread of from 6 to 8 per cent in the contract. (1693) In our particular business, sulphur is not as important a requirement. Our requirement as to it is roughly, if I remember rightly, one or one and a half per cent. We are not as particular about that as we are the other phase of it, a half per cent or so of sulphur not being very material in our grates. Our fusing point requirement of 2,400 degrees is not particularly high, but we have difficulty in getting the grades of coal that are as high as that. As to whether I know that there are almost billions of tons of coal in central Pennsylvania that will come up to our specifications of which I have spoken, my answer is "yes." There are lots of them that go below. The B. t. u's. is a specification which the contractor, in offering us his product, places, and which we then check. Our B. t. u's. will run roughly between 14,000 and 14,500. (1694) I know there are almost uncountable acres of that kind of coal in central Pennsylvania. Some of it has very low ash fusibility, too. As to the people from whom we bought coal in 1921, there were Berwind-White Coal
2971 & Coke Company; the Blaine Mining Company; Clark Brothers; the Consolidation Coal Company; Cosgrove-Wyncoop; the Delano Coal & Coke Company; the Empire Coal Mining Company; Frank, Friend & Steinman; the Hillman Coal Company; the Madeira Hill Company; Joseph Miller; Morrisdale Coal Company; B. Nicoll Coal Company; the Pennsylvania Coal & Coke Company; the Reitz Coal Company; J. H. Weaver; the Wright & Gibson Company. All supplied us with coal in 1921, some under firm contracts and some under spot coal purchases. (1695) Some of them are jobbers. We place contracts now for all our coal.

In 1922, due to strike conditions, we bought pretty near 300,000 tons of spot coal, I think. That was largely to replenish the depleted reserves. Every ton of our requirements is now covered by these three contracts. We believe that it is a wise thing, in order to protect our supply, to spread our contracts reasonably, so as to

cover different railroad routes and different delivery conditions, so that we won't get caught short, if something goes wrong in a particular district. (1696) I should say that the Weaver coal was less satisfactory than the other coals that we have been obtaining. I should say the Berwind coal was very satisfactory. (1697) I couldn't say as to whether in 1922 Berwind did not make deliveries any better than anybody else. That might well have been the case. I do not think Berwind-White have made regular deliveries right straight along. I think there might have been conditions of mine strikes, or what not, that might have affected Berwind's deliveries as well as somebody else. As to whether that caused everybody else's troubles and shortage in 1920 and 1922, I should say not; not in 1920. I believe there was a switchmen's strike in 1920. I should suppose that cost everybody the same kind of trouble that we had. That is a transportation difficulty. (1698) My own information, some of which might have been given to the Geological Survey, was that the utilities, gas, electric and street railway in the United States, used roughly 50,000,000 tons of coal. I don't know what per
2972 cent of those public utilities are supplied with coal shipped in privately owned cars. (1699) I should assume, without specific knowledge, that throughout the United States there is a great preponderance of public utilities that are not supplied with coal shipped in privately owned cars, that is, the preponderance of them, both as to number and as to the tonnage consumed. I am including in my figures, street railways, but not any steam railroads, except in so far as the utility might be supplying a steam railroad with part of the service.

By Mr. GREEVER:

The companies for which I speak are all private corporations (1700), organized and operated for the profit of their stockholders and for service to the public.

By Commissioner POTTER:

All of the companies to which I refer are subject to regulations with respect to the charges which they can make to the public.

By Mr. CURRY:

We estimate that about one-third of our coal requirement was secured from the use of private cars. All of the coal moving in private cars moved from the Berwind-White Company during this year. (1701) The Berwind-White has indicated the rail routing, the Pennsylvania Railroad to Jersey City. That is roughly 500,000 tons. The 300,000 tons we secure from J. H. Weaver. They originate on the Cambria & Indiana. The routing is Cambria & Indiana, New York Central, and Philadelphia & Reading. I know nothing about the Cambria & Indiana Railroad. (1702) The balance of our coal we secure from mines on the Norfolk & Western. Pocahontas is the major part of our supply; about 670,000 tons approximately. We bought that from the Pocahontas Coal & Fuel Company, I think.

It is not one of the Berwind subsidiaries, as far as I know. That coal moves over the Norfolk & Western down to Hampton
2973 Roads and is delivered to our docks at our plants by boat. In making our contracts we asked the operators submitting bids to state from which mines they expected to make delivery. We make actual operating tests of that coal to show the operating results. We also require him to specify in his contract an analysis of the coal that he expects to deliver us, and the limits are also given in some of the contracts—not the (1703) Weaver contract—[where] we have a specification adjusting the price, based on the market conditions of the previous or subsequent month. I do not think we had partial-output contracts with certain particular mines on the Norfolk & Western. I do not know of any provision in any of our contracts that provides for our taking a percentage of the output of this or that mine. I do not know of there having been any shortage of deliveries since we had this specific Pocahontas contract. I have no information on the question of car distribution at the mines.

Redirect examination by Mr. WOLFF:

As to what is "safe and adequate railroad service," I have heard it stated that something like 85 or 90 per cent is reasonable service, but I am not familiar with that and can not testify definitely as to that.

By Mr. LIVERIGHT:

If 85 to 90 per cent is safe and adequate service contemplated by the act, the question whether our storage would take care of the difference between that and 100 per cent, in times of emergency, depends on how long that emergency would last. (1705) I should hate to have only 85 per cent delivery last over as much as a couple of months. Of course, our storage is meant to take up fluctuations. If the fluctuations come on the top of a diminished storage, such as we had at one time, of 40,000 tons, why, that might have a very serious effect. If it came at a period when we had complete
2974 storage, it would not be of so much moment. As to whether I know from experience that these emergencies, as a rule, do not last over more than 60 to 90 days, my answer is "yes." Some factors of them have lasted that long, but I suppose the emergency, as a whole, in a general way, in the bituminous industry, has not lasted over 60 to 90 days. I am familiar with the provision of the law that permits the Interstate Commerce Commission to make special orders in times of emergency, but I personally, and representing utilities, have experienced not a little difficulty in obtaining priority consideration and priority provisions. This was not always because of the view which the authorities took, that we were amply fortified by our reserve (1706), but because of the pressure that other shippers of commodities exercised, or evidence they produced, that they also are essential to the life of the Nation.

W. R. ADDICKS, called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. WOLFF:

I am vice-president of the Consolidated Gas Company of New York. (1707) The gas companies with which I have official connection are the Astoria Light Heat & Power Company; the Bronx Gas & Electric Company; the Central Union Gas Company; the Consolidated Gas Company; the East River Gas Company; the New Amsterdam Gas Company; the New York & Queens Gas Company; the Northern Union Gas Company; the Northern, West Chester Lighting Company; the Peekskill Light & Railroad Company; the Standard Gas Light Company; the West Chester Lighting Company. During the past year, due to an order of the Public Service Commission changing from a candle power standard to a B. t. u. standard for the supply of gas, it necessitated a (1708) visit to the premises of all our customers. This covered a period of six or eight
2975 months, and we were able to find out just how many appliances were in use by our consumers, so that the figures I will now give you are fairly accurate. The number of meters in the district amount to 1,056,858. This is as of October 22, to April 23, 1923. There were 3,071,544 appliances in use, of which, however, burners for illumination amounted to 1,830,364, making a net of 1,241,180 appliances. Of those appliances, ranges were 401,000; cookers, which are small ranges, 286,000; hot plates, smaller still, 205,000; there were 72,000 gas irons; 116,000 heaters for heating spaces; 71,000 water heaters for heating water for domestic use; miscellaneous domestic appliances, 11,000; industrial appliances 50,000; hotel appliances, 23,940, which is largely cooking. So that you will note that a larger amount of these appliances are purely for preparing food or other domestic purposes. The total amount of our gas is 37,437,823,000 cubic feet per annum. About 50 per cent of this gas is used for cooking and domestic purposes. (1709) About 10 per cent for cooking in hotels, restaurants, institutions, and clubs. About 10 per cent for illumination, 13 per cent for house and space heating, 7 per cent for water heating, and 10 per cent for industrial purposes. The larger gas consumers for industrial purposes are particularly for newspaper work and bakeries. They are some of our largest consumers. Others, however, are art glass, automobiles, China decorators, cloak and suit manufacturers, clothing sponging and renovating. They are very large and important consumers. Meat products, lamp manufacturers, and printers are among the largest consumers. Indicating the importance of this, for instance, in our newspapers in 1922, one of our newspapers used 22,000,000 feet of gas; another 9,000,000; another 7,000,000; another 25,000,000; another 17,000,000; another 2,000,000; another 16,000,000. Of the hotels for cooking, 12,000,000, 15,000,000, 16,000,000, 26,000,000. Bakeries, 44,000,000, 26,000,000, 10,000,000, 10,000,000, and so on down

the list. Automobile accessories, 36,000,000; wire manufacturers, 19,000,000, and so on. This gives you an idea of how large the consumption may be.

(1710) The companies which I read have all one or
2976 more plants. For instance, the West Chester Lighting Company have five separate plants and the Consolidated Gas Company have six. The manufacture of gas consists of either coal gas, in which gas coal is used, and on which this hearing has particular bearing, and water gas. In the case of water gas, coke from the gas coal used in coal gas manufacture is utilized in the generators, and therefore even water gas plants are likewise interested. The Astoria Light, Heat & Power Company has a capacity of 86,000,000 cubic feet per day of 24 hours, of which 20,000,000 is coal gas. The Bronx Company, 2,200,000 cubic feet; the Central Union Gas Company 11,800,000, of which 3,800,000 is coal gas; the Consolidated Gas Company, 67,500,000 cubic feet, which is substantially all water gas. The East River Gas Company and the New Amsterdam Gas Company have a single plant of 36,000,000 cubic feet. New York & Queens, 2,750,000. These are figures which are all last year's report to our public service commission. The Northern Union Gas Company, 450,000 cubic feet. The (1711) Northern West Chester Lighting Company, 450,000 cubic feet. The Peekskill Light & Railroad Company, 500,000 cubic feet; the Standard Gas Light Company, 10,500,000 cubic feet; the West Chester Lighting Company, 18,250,000 feet, or a total of 236,407,000 cubic feet of gas in 24 hours, for the companies combined. These companies supply, in the city proper, every street and avenue in the smaller districts and immediate business center and the adjacent residence district, but they do not cover outlying districts. For instance, West Chester County, except where we have high pressure lines, we run many miles through the country. I have accentuated the importance of gas for the daily food of the public. When I originally went into the gas business I had the experience of Mr. Lieb in regard to the clouds coming up, but Mr. Lieb has relieved the gas company, with his electric light, of that anxiety. We no longer have a peak which depends upon the
2977 clouds, but, we are watching the thermometer. When thermometer varies, we have to be as busy as Mr. Lieb is when the cloud comes up over New Jersey. With respect to continuity of gas supply, it is essential for maintaining service. Being compelled to go into the spot market because of failure of contract deliveries (1712) means an increase in cost of manufacture that cannot be recouped, as the price of gas is defined, and the price fixed by legislative acts, which only a court decision favorable to the company can overturn. The company must actually have suffered a loss before court proceedings can be instituted. In 1920, it cost our company about $1,000,000 to provide coal that the contractors were unable to supply. As far as our commission of New York is concerned, under the law which existed under the so-called 80-cent law, and now

under the dollar law, which is being litigated at the present time, the commission has no right to increase the price of gas, but only to decrease it.

By Commissioner POTTER:

As to whether public officials, in fixing the price of gas, inquire into the cost of producing gas and the cost of coal, they inquire into everything, in all its details. With respect to the making of coal contracts, the contracts are distributed, having in mind, first, reasonable certainty of delivery; second, divided so that transportation shall be over different railroad systems. For instance, in 1923-1924, our aggregate contracts were 666,000 tons gross, the companies having private (1713) cars, having contracts of about 240,000 tons of this amount. That comes all over the Pennsylvania Railroad in private cars. That [which] came over the Baltimore & Ohio and the Reading Railroad was 250,000 tons, and that by way of Hampton Roads in ships of three, four, and five thousand tons, 175,000 tons. Contracts are made for the coal year with specified monthly deliveries, 10 per cent or less; written notice on the 20th of each
2978 month. This method tends to uniform delivery and forms substantially a monthly contract, in so far as quantity is concerned. The quality of coal is based on working tests on a plant running at 3,000,000 cubic feet per day capacity, for at least six days, after analyzing the gas coal from the small samples. The quality of coke made is of great importance for water gas manufacture and its fusing point of ash, as coke involves not only the cost of manufacture, but the capacity of the generators using a peak demand, which may be as much as 20 to 33 per cent in from 24 to 72 hours. That is the effect of the thermometer. (1714) In 1917, before we had any serious coal strikes—of course, I know in 1903 they were serious, but up to that time, 1917, they were not so serious as they have been lately—and if the temperature was charted day by day in inverse order, that is to say, the thermometer on the chart inverted, and beginning with the output coincident with the temperature, making the scale proper so as to bring it that way for millions of feet output in 24 hours, it was found that that curve of output practically followed the temperature. So that they were practically coinci-
2979 dent during the whole of the 12 months. At the present time, however, I attribute it largely to the coal strike, people not being able to get coal, have put in gas appliances for heating, in very large quantities.

By Commissioner POTTER:

That is, they have put in gas heating appliances, taking the place of coal. In other words, it practically is emergency work, and strong and full work.

By Mr. WOLFF:

There are 117,000 of those. The result of that has been that while in summer you will find that same coincident, the moment it gets

into fall there is a wide divertance. In (1715) other words, the gas output is above, and when it gets into the severe winter, the peaks are like the peaks of the Andes Mountains. The variation is really terrific. In 24 to 36 hours, the variation may be as much as 50,000,000 or 60,000,000 cubic feet, at least 50,000,000 cubic feet, and visualizing that, I should say that was equal to the entire output—one and one-half times the entire output of the city of Boston.

By Commissioner POTTER:

People who, on account of the coal strike used gas, found it so convenient in New York City that they are continuing to use the appliances instead of returning to the coal. They are continuing to use them regularly, so that we now have a heating load to take care of, instead of the old lighting load that Mr. Lieb called attention to.

By Mr. WOLFF:

The coal which that gas displaces is anthracite (1716) coal. With respect to the quality of the coal, with respect to sulphur, by law, we are only allowed to have certain definite number of grains of free sulphur in our gas, and no sulphuric hydrogen. There-
2980 fore, we want coal materially light in sulphur. We have to have coal these days with much more than we had 25 or 30 years ago, but it does have a great influence in our purifying plant. The quality of the coke is very important. As illustrating that, outside entirely of our own manufacture, we had a contract with a by-product oven company, and we had to practically give up the use of their coke on account of the inferior quality of the coke for water gas manufacture. Of course, when we use coke anyway we are apt to have some loss in our manufacturing capacity, and if the coke is very bad, it may be 20 per cent or more, and that is very important, with these peaks, that we should not lose that capacity. Twenty per cent on 200,000,000 is a very large proportion of our capacity, and represents a very large plant. Later on, this same company adopted the policy of getting a uniform supply of coal, and they produced a beautiful coke, so that we reestablished relations, and used their coke with very great success. Last year when they had to get what coal they could, they (1717) had to get English coal, and while I did not break off relations with the company, because we were all in the same boat, and we were all doing the very best we could, there was a very striking falling off in the value of that coke. That was by-product coke. The same thing is true of our own gas house coke. Although gas house coke ordinarily is not a success or not as good as by-product coke for water gas manufacture, we find that with a good quality of coal it is getting up very close as between the two.

As to the annual use of coal from 1919 to 1923, the six months refers to the coal years. In 1919 we used 390,000 tons gross; 1920, 510,000 tons; 1921, 533,000 tons; 1922, 491,000 tons; 1923,
2981 569,000 tons; 1924, 219,000 tons, for the first six months. There is quite a variation in the coal used, and it is largely

based on our ability to get coal, so that we frequently have to start and stop our coal gas works, depending upon our supplies. This company has now purchased 230 acres of property in the Bronx, in New York, with the idea of increasing very largely the use of gas coal, but it must be assured of a reliable supply of good coal, and in order that that may be understood (1718) thoroughly I produce here a Government chart, which will visualize what I mean when I am talking about the Astoria plant. (1719)

(The following requests by Mr. Curry were, without objection, copied into the record.)

"The following information is requested with respect to the distribution of cars on the Pennsylvania Railroad (1720) during the car shortage periods[1] from March 1, 1920, to December 1, 1920, and from October 1, 1922, to June 1, 1923:

"Pittsburgh division, South Fork district:

"1. Show by months the commercial per cent of distribution on the Pittsburgh division, South Fork district, of the Pennsylvania Railroad. By commercial per cent is meant the percentages of cars to which mines not supplied with assigned cars were entitled for the month.

"2. Show for each month (a) the number of cars ordered by Eureka mines Nos. 30, 31, 35, 36, 37, 40, and 42, of the Berwind-White Coal Mining Company in this district, (b) the number of private cars placed at these mines, (c) the number of system cars placed at these mines, (d) the total number of cars placed at these mines, and (e) the per cent which the total cars placed at these mines bears to the total cars ordered by these mines.

"3. Show for each month (a) the total cars (assigned and unassigned) ordered by all mines in the South Fork district of the Pittsburgh division, (b) the total number of cars (assigned and unassigned) placed at mines in this district, and (c) the per cent of all such cars placed to all such cars ordered. (1721)

2982

"Monongahela division, exclusive of Southwest branch:

"4. Show by months the commercial per cent of distribution on the Monongahela division, exclusive of the Southwest branch, of the Pennsylvania Railroad.

"5. Show for each month, separately for the Mather No. 1 mine and the Nemacolin mine, (a) the number of cars ordered by each of these two mines, (b) the number of private cars placed at each, (c) the number of system cars placed at each, (d) the total number of cars placed at each, and (e) the per cent of total cars placed at each of these two mines to total cars ordered by each.

"6. Show for each month (a) the total cars (assigned and unassigned) ordered by all mines on the Monongahela, exclusive of the Southwest branch, (b) the total number of cars (assigned and unassigned) placed at mines on this division, exclusive of the South-

[1] The reports of the American Railway Association show the periods named to be substantial car shortage periods on the Pennsylvania Railroad Company. (1722)

st branch, and (c) the per cent of all such cars placed to all such
rs ordered.

"The following information is requested with respect to the dis-
bution of cars on the Louisville & Nashville Railroad during the
r shortage periods[1] from March 1, 1920, to January 1, 1921, and
om July 1, 1922, to October 1, 1923:

"1. Show by months the commercial per cent of distri-
983 bution on the Cumberland Valley division of the L. & N.
Railroad. By commercial per cent is meant the percentage
cars to which mines not supplied with assigned cars were entitled
or the month.

"2. Show for each month (a) the number of cars ordered by the
ynch mine of the United States Coal and Coke Company, (b) the
umber of private cars placed at this mine, (c) the number of system
ars placed at this mine, (d) the total number of cars placed at this
ine, and (e) the per cent which the total cars placed at this mine
ears to the total cars ordered by this mine.

"3. Show for each month (a) the number of cars ordered by
Banner Fork mines No. 1 and 2 of the Fordson Coal Company, (b)
he number of private cars placed at these mines, (c) the number of
ystem cars placed at these mines, (d) the total number of cars placed
it (1723) these mines, and (e) the per cent which the total cars
placed at these mines bears to the total cars ordered by these mines.

"4. Show for each month (a) the number of cars ordered by the
Coxton and Kayu mines of the Melcroft Coal Company, (b) the
number of private cars placed at these mines, (c) the number of
system cars placed at these mines, (d) the total number of cars
placed at these mines, and (e) the per cent which the total number
of cars placed at these mines bears to the total cars ordered by these
mines.

"5. Show for each month (a) the number of cars ordered by No. 1
mine of the Wisconsin Steel Company, (b) the number of private
cars placed at this mine, (c) the number of system cars placed at
this mine, (d) the total number of cars placed at this mine, and (e)
the per cent which the total cars placed at this mine bears to
2984 the total cars ordered by this mine.

"6. Show for each month (a) the total cars (assigned and
unassigned) ordered by all mines on this division, (b) the total
number of cars (assigned and unassigned) placed at all mines on this
division, and (c) the per cent of all such cars placed to all such cars
ordered.

"The following information is requested with respect to the dis-
tribution of cars on the Chesapeake & Ohio Railway during the car
shortage periods[2] from March 1, 1920, to January 1, 1921, and from
July 1, 1922, to October 1, 1923:

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[1] The reports of the American Railway Association show the periods named to be substantial car shortage periods on the Louisville & Nashville Railroad. (1724)

[2] The reports of the American Railway Association show the periods named to be substantial car shortage periods on the Chesapeake & Ohio Railway.

"1. Show by months the commercial per cent of distribution on (a) the New River district of the Chesapeake & Ohio Ry., and (b) on the Logan district of this railroad. By commercial per cent is meant the percentage of cars to which mines not supplied with assigned cars were entitled for the month.

"2. Show for each month, separately for each of these two districts, (a) the total cars (assigned and unassigned) ordered by all mines in the district, (b) the total number of cars (assigned and unassigned) placed at mines in the district, and (c) the per cent of all such cars placed to all such cars ordered.

"3. Show for each month (a) the number of cars ordered by Rum Creek mines Nos. 1 and 5 of the Steel & Tube Company of America in the Logan district, (b) the number of private cars placed at these mines, (c) the number of system cars placed at these mines, (d) the total number of cars placed at these mines, and (e) the per cent (1725) which the total cars placed at these mines bears to the total cars ordered by these mines.

2985 "4. Show for each month (a) the number of cars ordered by Minden Mines Nos. 3 and 4 of the New River and Pocahontas Coal and Coke Company in the New River district of the Chesapeake & Ohio Railway, (b) the number of private cars placed at these mines, (c) the number of system cars placed at these mines, (d) the total number of cars placed at these mines, and (e) the per cent which the total cars placed at these mines bears to the total cars ordered by these mines."

W. R. ADDICKS (1726) resumed the stand and testified further as follows:

By Mr. WOLFF:

With respect to the delivery of coal to the plant, all rail coal is delivered in small harbor barges, and is delivered to piers at the Astoria, where there is available but 12 feet of water, and until last year we were not able to receive any coal requiring a greater (1727) depth of water than that. As a result largely of the experience in 1920, the company determined to have available water to take the largest ocean-going steamers, and I have here a picture of the Astoria plant taken in August, 1921, which shows an airplane picture. That bridge is the connecting railroad bridge of the Pennsylvania Railroad. At the extreme right-hand corner the area there, which is not occupied, on the main line—not the dock beyond; that dock beyond is used by a concern beyond us for mahogany logs—you will notice there is nothing there but the land, and the bulkhead is not completed. This [indicating] is a sketch plan of Astoria taken also from an airplane picture, but it is an

2986 artist's picture. It shows the new coal unloading facilities.

In order to reach this new wharf it is necessary to make a detour of five miles into Flushing Bay. The coal from the railroad

ocks down in Jersey only requires one mile, but there were so many eefs and rocks that it was impossible for a large steamer to get in. That was probably what kept off that improvement for a great nany years. (1728)

Mr. WOLFF. * * * We offer in evidence the airplane (1729) icture showing the condition of the plant and the coal storage pro-ided as of August 1, 1921.

(The picture referred to was received in evidence as Exhibit No. R-34.)

Mr. WOLFF. The next is a view as of September 7, 1923, showing he same location, with the coal unloading equipment installed, and part of the space filled.

(The picture referred to was received in evidence as Exhibit No. R-35.)

Mr. WOLFF. Also a view as of October 22, 1923, showing the same space with further coal in place.

(The picture referred to was received in evidence as Exhibit No. R-36.) (1730)

This new storage provided 1,600 feet of bulkhead, with 26 feet of water. While the new coal unloading facilities for steamers are provided for Hampton Roads coal, it fortunately made available English coal last fall, of which 119,000 tons was imported in steamers of 500 to 7,000 tons. The Consolidated Gas Company was unable to obtain priorities for cars on its contract coal because it has been so forehanded in providing coal storage. Those having no oil in their lamps had to be helped first. Mr. Hoover asked that no act should tend to increase coal prices, so that instead of going into the American spot market we purchased all of the 2987 available first-class English gas coal, with the hearty cooperation of the United States Shipping Board and without this it could not have been done—we were able to deliver this coal when the first unloading tower and barge became available, August 15, 1922. The stock of coal at Astoria in this new storage will be about 300,000 tons. Our present stock is about 332,000 tons, the latter coal being the storage (1731) for coal arriving at the harbor by rail delivery. While providing storage for gas coal is laudable, in view of the fact that the gas must never fail, although any other public service may fail—it is of paramount importance. One must no be blind to the disadvantages of storage, which are: Cost of investment and taxes on the investment, interest, and depreciation of coal storage; danger of spontaneous combustion in gas coal, with resulting loss of tonnage or reduced yield in salvage portion of the coal. However, in addition to the absolute necessity for the continuity of gas service it may readily be that in a plant such as Astoria inferior gas coal bought spot, as in 1922, might cost at the rate of $1,000 per day. In 1920, where about $1,000,000 was spent to meet a coal shortage, this amount would represent about 8 per cent

(1732) on the value of 200,000 tons of coal storage at $7 per ton, for a six months period, for a period of nearly eighteen years. The Consolidated Gas Company has over 1,000,000 consumers, and assuming but three rooms to every consumer, the entire failure in the gas supply following the ordinary methods of the company under normal circumstances would require a personal visit to 3,000,000 rooms by an employe, to be sure that the 3,071,544 appliances in the district were shut off before gas could be turned on to all consumers. If electricity goes off temporarily, it can be turned on without
2988 injury to the individual in a house. If the gas, however, is turned off, there may be burners, or appliances that are in use, where people are absent from the room. If the gas is turned on, you immediately have danger of asphyxiation, fire, or explosion; so that it is a habit of gas companies, in general, that before turning gas on every room is visited and every appliance and burner is examined before the gas is turned on the building. (1733) If a cessation of gas supply in a city occurs, that thing would be multiplied enormously, because every consumer in the city would be affected. Practically the result would be that first all gas service valves would have to be closed; then each meter would be turned on and each burner would have to be examined. We have not had a coal fire in our gas coal for a number of years; I think it is eight or ten years since the last dangerous fire. I think some 40,000 tons was involved in that time, but we have two simultaneous fires at this time in two separate piles at Astoria in gas coal, and as a result of that we have stopped all shipments of all coal from the mines until that fire is certainly disposed of and under control. In 1920—and this statement only refers to that date—we endeavored to get priority orders, and we did get priority (1734) orders and furnished them to our regular contractors, although we used it to some extent for some spot coal to make up for some deficiencies. There was one contractor who did not require any priority. The maximum number of cars shipped in any week under these priority orders was 280, or
90% out of 312 approved. The minimum was 70, or 22%,
2989 and the average 215, or 68.8%. In the several weeks immediately prior to the effective date of the priority order shipments sent by the same contractors were substantially less than during the period of priority, and in the period immediately following the close of priority orders the average number of cars was less than during the period of priority, but greater than during the period preceding it. Exact data in respect to shipments outside of priority are not available, because we have not the records together.

By Commissioner POTTER:

The contractor that did not require priority orders was Berwind-White. The reason was private cars. This contractor, whose name you have now brought out—I did not intend to bring it out—his standing order was 1,882 tons per week, and during the period of priority (1735) his maximum delivery was 158% and his minimum

delivery 53.5%, or an average of 103%, during the entire period. At that particular period a most unfortunate experience occurred, the most unfortunate we ever had. We only had 20,000 tons of coal on the first day of April of that year, largely due because our stocks had been so heavy that the Government would not allow us to bring in our coal, because we had plenty, and the net result was that we did not have a pound of coal on hand in June, 1920.

By Commissioner CAMPBELL:

As to whether at the time this contractor got his 103% or 158% there was any engine shortage, any locomotive shortage, I don't recall any trouble of that kind at that time, but that is 1920. I did not burden myself with that particular question, but there were general troubles at that time. However, that is a fact so far as delivery is concerned. (1740) In our very serious time in 1920, when
2990 (1741) we were entirely out of coal; of course, the contrast between having no coal and having a very large stock disturbed us greatly. We were first helped out by private car delivery. There were two contractors who had private cars. Then the situation was saved, in my judgment, by the priority orders that went into effect the first of August, so far as we were concerned, and those two influences carried us through that following winter. During that year, however, we did have to pay a very high price for some of our coal, as high as $16.00 a ton. Having put in this deep water transportation facility—and, by the way, spot coal that year was 119,000 tons—having put in these deep water facilities, we bought 145,000 tons of spot coal in the United States and 119,000 tons in England. Our price of coal domestically was not over $8.60 and the English coal was not over $9.00 a ton. The average, as I recall it, was under $8.50 a ton. I attribute that entirely to the deep water facilities and the large market for coal.

By Mr. WOLFF (1742):

As to interruptions in our service which prompt us to take these very great precautions, not only the difficulty of taking care of gas in case of interruption in service but the health and life of the people are dependent upon our continuous supply, and if interrupted for even a comparatively short period I do not see how anybody could have any cooked food in New York in the course of a couple of days. In obtaining that coal supply to meet those conditions private cars are very helpful, conspicuously so in 1920. It led me to realize how important they were for our service.

Cross examination by Mr. BROWN:

My idea of this case is that the private car use will be restricted under certain conditions, those conditions being when there is
2991 a short car supply. When there is no lack of cars, I understand there is no interference with private cars. I understand in time of car shortage the use of private cars shall be upon the dis-

tributive share of each mine which they serve. (1743) The current contract for coal is 665,000 tons or thereabouts; but that is not our use. Our estimated use for this year is 600,000 tons, and 66,000 was to increase stock. That is our estimated use this year. At this time I think we have in storage between 250,000 and 270,000 tons of gas coal. (1744) Whether in normal times an ordinary car shortage would hardly reach above 60 days depends upon circumstances. It is not only car shortage but it is coal strikes which may last four or five or six months. I think the coal strike in 1902 and 1903 was longer than the last coal strike. (1745) In times of no interference, no artificial interference in transportation, with adequate facilities, or adequate and safe facilities, as I believe somebody used the term, we have not experienced, with our "present method of making our contracts at—in other words, we give notification to each contractor on the 20th of the month that for the following month we will require so many tons, either the stated amount in the contract or 10 per cent more or less. He does not have to worry thereafter about 10 per cent more or less, in the old fashioned way of making it on the whole contract, and be called upon 10 per cent of the whole contract in the last month. I distribute it by months.

By Commissioner POTTER:

If I were assured of our coal I would not care whether it came in railroad cars or private cars or steamers, so long as we get it and the public is served.

2992 By Mr. BROWN:

Part of our coal comes to us from the B. & O. and also from the Reading. (1746) I think about 170,000 tons comes from Hampton Roads. I don't know what is used from Hampton Roads [to bring the coal to us]. I know nothing about the distribution on the Norfolk & Western. The coal over the Baltimore & Ohio and the Reading is delivered in New Jersey at tidewater and then placed into barges of about 1,000 or 1,200 tons and comes to the wharf, where we have about 12 feet of water, and discharge it with apparatus there which has been in use a great many years. We buy our coal delivered alongside of our dock. (1747)

By Commissioner CAMPBELL:

At the present time the maximum capacity of our storage is about 632,000 tons, being provided for as storage, but it is not only for our requirements at Astoria of about 600,000 tons but also for the New York Edison surplus supply, and we are sharing that at Leicester Creek, where we can bring in steamers drawing 25 feet of water. If all our storage was devoted to our use and not to anyone else's, we could store enough coal at present for one year as we are running. We have a maximum capacity of about 720,000 tons at Astoria, but we have never reached that maximum.

By Mr. LIVERIGHT:

We use from 60,000 to 65,000 tons a month, so that we have on nd at the present time between 3 and 4 month's supply. I said at our consumption was 600,000 and that the contracts were 66,000. As to whether 65,000 tons a month would run us up to bout 800,000, we "could run up—I just made the statement to he commission that if we were running full every month of the ear, our requirements would be something over 700,000 tons, but we shut down a part of our plant in the summer." It 993 is not our purpose to store 50 per cent of our needs. We aim to have about 3 month's supply at the maximum de- nand, ordinarily. If we see ahead something coming, we will store eyond that. You will remember that there was a certain incident hat happened about the first day of September, and that is one f the reasons (1749) we have a little more coal on hand now han ordinarily. Some of the storage I have given is devoted to nthracite coal, as well as bituminous gas coal. I don't know when re were not receiving coal in privately owned cars. I entered the ervice of this company in 1903. I have a record here, as going ack to 1912, and two of the companies that have private cars now were supplying us with coal then, and I assume at that time hey were supplying it in private cars as well. In 1920 my best memory is that on the first of April nobody would make any coal contracts. It was not until very late in the season that we could make definite coal contracts. As to whether there was any con- tract with these private-car owners in 1920, we had some arrange- ment with this particular contractor at about that date. What that contract was I can not remember. (1750) We had a firm contract with that particular concern that year, but what the date of the contract is I can not remember. I think it was made coincident with or just before the emergency, because they agreed to deliver a certain amount of coal to us every week. There was always con- tract relation with this contractor, even prior to this time. I am speaking now from the knowledge as an officer of the company, but not as negotiating the contract. The other private car owner who contracted with us was the Westmoreland Coal Company. (1751) Their delivery has been second probably to Berwind-White, but very good.

2994 "Q. [By Mr. Liveright.] From what sources do you get your coal on the Baltimore & Ohio and Philadelphia & Reading?

"A. You mean what contractors?

"Q. Yes.

"A. Well, the Pittsburgh Coal Company, and the Pittsburgh Ter- minal, which comes by way of the Western Maryland, as I recall it, primarily, and P. & L. E. I think they are the only two—and the Consolidation Coke."

As to whether their service to us has been reasonably satisfactory, it has not been as good as the service that I particularly call atten-

tion to in my experience in 1920. It stands out indelibly in my mind, what happened that year. I cannot give you all the details. As to whether there was any marked distinction in the service we got from the Consolidation and Pittsburgh Coal and that which we got from Berwind and Westmoreland in time of stress. (1752) There was a very marked difference at the time that I refer to. I don't remember the difference in the percentage of deliveries. I have a statement showing the percentage of delivery by private cars.

By Mr. WOLFF:

In the statement I read I gave the performance under priority orders in which all other contractors except the private car owners were included. In that statement were all of our contractors. In other words, these priority orders were given first to our regular contractors, so that this is the performance of all of the other contractors as of that same time. (1753)

2995 By Director BARTEL:

By stating that we gave the priorities to our regular contractors I meant that instead of going out and buying coal from outside contractors the priority orders were furnished to the annual contractor.

By Mr. LIVERIGHT: (1754)

As to whether we had blind priority enabling us to fill in the place where we could get the coal, I don't recall just how that was done, but it was done in accordance with the requirements of this Commission in every particular. As to what has been the performance of our contractors supplying coal in system cars in 1922 (1753) I am not able to answer. I do not see any figure by which I can answer at the moment; nor can I answer as to the performance by contractors shipping in system cars for the first six months in 1923. I can not give any particular information on the performance of our private car owners in 1922, except as I gave you during that period. (1755) As to why my testimony is limited to 1920, it is because we had this particular experience in 1920, which demonstrated the point in question. I recall a car shortage in 1922, but I provided for all our requirements in 1922 by buying English coal, and I don't recall just what that situation was. As to whether I know that there was a very decided shortage of cars in the six months including the fall of 1922 and early winter of 1923, my mind is not impressed with it, because we were getting this 119,000 or 120,000 tons of English coal, and I don't know just what that is. We got that English coal up to January, 1923. (1756) We were in very good shape, as I recall it, at that time.

2996 By Mr. GREEVER:

The company I represent is a private corporation organized and operated for profit. It is operated for the service of the public and formed for the service of the public primarily and originally, and, of course, for a profit. I don't think the public is our market.

That is a new expression. The market is what the public uses, but no different from any other commodity sold all over the United States. (1757) We serve the public for money in the very best way we know how to serve it. We always get more money that way, to have everything go more smoothly. Good relations always are pleasant things to have. To be in business for the money to be made out of it is a fair statement I think with everybody. Ours is not an exception.

By Mr. WOLFF:

The amount of money we can make out of this business with the public is limited by the legislative act, which does not permit us to earn a fair return, and the United States Court at times says so, and has said so within a year or so, that we were not making a fair return, (1758) and therefore declared the 80-cent law unconstitutional. Thereupon the legislature has passed another restrictive act to $1.00, and that is now being tried out in the court, so that we are very much restricted as to what we receive, and the court's decision is that up to date we have not had a fair return. As to whether our ability to use privately owned cars tends to increase our profits, (1759) that would be true, if the use of privately-owned cars assures us of a supply of coal without having to go out in the spot market and pay a high price for the coal. Otherwise it is a mere question of service to us, and in return we have to furnish
2997 service to the public. That was true in 1920. I don't know that I can answer that it was true last year, because I took other means. I went to England for coal.

By Mr. HAMMOND:

We manufacture both water gas and coal gas. I can not give the average daily output. There is such a variety. We have a certain date in our mines where we pass 100,000,000 a day. (1760) Our maximum demand up to date has been about 109,000,000 a day. What it is from day to day is right in that chart. I should say when we are sending out 78,000,000 we were making about 22,000,000 feet of coal gas. The remainder is water gas. We manufacture our own coke into water gas. Before the coal troubles we had a business of about 100,000 tons of coke a year for sale, but since the coal troubles we have used all our coke in our gas manufacture, and had to buy coke besides.

By Mr. GUTHEIM:

The reference I made that at one time the coke furnished was not good and then it became good and then went off again was to the Seaboard By-Product Company in New Jersey.

By Mr. CURRY: (1761)

We have no by-product coke ovens that we operate. I stated that approximately 240,000 tons were contracted for to be moved in private cars and that they originated on the Pennsylvania Railroad,

the private cars being those of the Berwind-White and the Westmoreland Coal Company.

"Q. [By Mr. Curry] As I remember it, you also testified that 250,000 tons were contracted for delivery from some point on the B. & O.

2998 "A. Whatever those figures were at the time.

"Q. That is my recollection.

"A. I did not say all B. & O. I said B. & O. and P. & R., because they come by the B. & O. and P. & R."

That coal originates in the Fairmont district, on, I should say the P. & L. E. and the B. & O. (1762) Some of it comes by way of the Western Maryland, and I don't remember whether it originates on the Western Maryland or not. I don't know whether that coal is transported in private cars or not. If it is, I don't know of the fact. (1763) As to the coal contracted for to move to Hampton Roads, I think it is over the Norfolk & Western. It comes from Elkhorn, Ky., and from Stonega, which is near the West Virginia-Virginia line. I have not the information as to whether that coal moves in private cars. I know that the Stonega coal does not originate on the Norfolk & Western and, of course, the other is out in Kentucky. I don't think the Norfolk & Western goes to that point.

By Commissioner POTTER:

I spoke of moving some coal under priority orders. That coal moved from the mines that we had under contract with some spot orders purchased in addition. (1764) We moved the coal from the same mines that we would have moved it from, in so far as their contracts covered it. Having a shortage of coal from non-delivery prior, we placed some spot orders.

"Q. [By Commissioner POTTER.] You understand the contention of those who oppose private cars is that if shippers are not allowed to use private cars the effect will be to compel shippers to broaden their purchases, and thus give certain mines a market which now are without a market. Did that turn out so in that case, where you had to use emergency cars?

2999 "A. Yes; I think you can say it did, to a degree, because we purchased coal at that time from people we had never purchased coal from before, and therefore that would confirm your statement; but it was due to the fact of not having received coal to some extent (1765), not having received coal before, although we were restricted to our then use of coal and not for storage. * * * So far as we were concerned, we have a certain restricted field anyway, in buying gas coal. It is a little different from steam coal, because there is a very large amount of steam coal available, whereas there is a considerably smaller amount of gas coal, and therefore in our particular case I could not make as broad a statement as you put in the question.

"Q. I think the statement was made in one of the expressions in a recent case, that to abolish the private car would not help the gen-

eral coal producer in busy times, as regards public utility coal, because the emergency cars would take the same place, and would use the same car as moved privately, and would not help the producer.

"A. In other words, the assigned car would go through the same certainty as a private car and it would make no difference to the public utility for that reason. In 1920 we had the particular case, but before the order was given the private car was a wonderful assistance. After the order was given it was another matter. (1766)

"Q. You do not understand me. I think the statement was made that in time of coal shortage, where resort had to be had to emergency orders, the effect upon the coal producers would be exactly the same as though the private car were used. In other words, the use of the emergency order, instead of the private car, did not force the coal buyer to distribute more generally his orders. I am wondering if they are right in that?

3000 "A. I should not do it in my case. I would not go to a single contractor other than our regular contractors in order to get coal. I would take that same priority order and give it to our contractor, if it was left to my own free will.

"Q. But in the case you speak of, where you did use an emergency order, you said you did place cars at some mines other than those at which you would have placed them if you would have had private cars.

"A. I did in that case, sir.

"Q. So, in that case the outside mine owners did derive some advantage from not having the private cars.

"A. Yes; in this year—1922—I bought, much against my will, 119,000 tons in England."

By Mr. CURRY: (1767)

That was purchased about 1922 and was made during the coal troubles, during the coal strike. As to whether it was made because of any question of private cars or system cars or because of the bituminous coal strike, it was made on account of the coal strike and other general troubles that were existing at that time, and looking ahead, as to whether we would have enough coal on hand to carry us through; and my best memory on that is that our stock of coal at a certain time late in the fall was just equal to what I had bought from England. All the American coal had been used up, and we were dry. In other words, if I had not ordered any English coal, I would not have had any coal on hand at a certain time.

W. L. PEPPERMAN (1768) called as a witness and, having been duly sworn, testified as follows:

3001 Direct examination by Mr. EDWARDS:

I am vice president and treasurer of the Interborough Rapid Transit Company of New York. That company operates the subways and elevated railways in the Boroughs of Manhattan, the Bronx,

and Queens. It supplies the electrical energy for the operation of such of the Brooklyn rapid transit lines as lie in those boroughs. It supplies the electrical energy necessary to operate all of the street cars in those three boroughs except one line up Third Avenue, and some scattering lines in the Borough of the Bronx. The passengers carried each day are well in excess of five million. The configuration of the island is such that no other form of transportation could take its place. (1769) If we were to suffer an interruption of operations and all traffic were removed from the streets and the workers were to march with the precision of the West Point cadets, you would not have the street capacity for the people to go to and return from their work. These arteries of travel are, therefore, to the life of New York what the arteries are to the human body. In addition to our own problem we are tied up with the New York Central and the Long Island Railroad, to furnish them electrical energy to such a degree as we might spare it for them if they should suffer any interruption in their power plants. The Interborough Company generates its own electricity for all these purposes. In doing so it is now burning about 2,500 tons of coal a day. Its annual requirements are about 800,000 tons. It burns slightly less in the summer months because the cars are not heated in the summer months. In order to create the amount of energy necessary to meet the problem that I have just outlined in the power plants which it has, it must not only secure coal of the highest quality,
3002 but coal of a uniform grade. Experience has shown that the highest quality of coal is the most economical in so far as our power plants are concerned. They are built, stokered, and boilered (1770) having in mind burning that quality of coal of a uniform grade. The economic side of it I mention because despite what a former witness said on the stand, there is one thing in New York that is not higher than the balance of the United States. The Interborough Rapid Transit still hauls its passengers over a railroad costing $8,000,000 a mile and in cars costing $30,000 apiece for five cents.

By Commissioner POTTER:

That is a necessity. But we must have this high-grade coal of a uniform quality for a second reason, to get the capacity. If we have mixed coals of inferior quality, or inferior coals, coals of varying characteristics, we cannot create the amount of energy necessary. We have no storage facilities. Our storage facilities up until now have been this continuous flow of coal from the mine to the power house, which is afforded by cars devoted to our service and by barges and tugs in the harbor devoted to our service. We protect ourselves in only one other measure, in that we also route our coal to New York over two separate trunk lines.

By Mr. EDWARDS (1771):

The coal is loaded directly into the power house bunkers from the barges. The power houses are so constructed that coal can only

be taken in that manner. At the present time we buy our coal from three contractors, Berwind-White, Consolidation Coal, and Logan Coal. We get two-thirds of our coal from Berwind-White. With the exception of one year, when the contract expired—and it expired
3003 in the midst of chaotic conditions in the coal trade, when we felt it unwise to negotiate a new contract in that year—the Berwind-White Coal Company have supplied the power plants since their erection. One was erected with the electrification of the elevated railways and the surface lines, I think, in 1902 and 1903, and another was erected with the completion of the first or original subway in Manhattan, which was in 1904. (1772) As to our experience with respect to reliability and uniformity of delivery, so far as the Berwind-White Company is concerned, except for the year in which we had no contract, our percentage has been 100, because it is a matter of national knowledge that the transportation of New York has never ceased for a moment, and we have never had any storage. In other words, by having a responsible private car owner to make the deliveries, it has really been unnecessary to provide expensive storage facilities. We have looked upon the use of this equipment and the pace which it has set, "and 20 years of the eating of the cake, with no interruptions, as our only answer to the question why we have not provided storage facilities." When I say we have no storage facilities I do not mean to say that there could not be a snow storm where we might suffer 24 hours of interruption. The plants are stokered automatically, and the coal is elevated from the barges into what you might call the attic, and the attics in each of these power houses contains six days' supply. We make a practice of tying up at the docks as many extra barges as the dock will hold, and that is the cushion, as against the snow storm or sleet storm, or some other temporary interruption to this flow. (1773) As to how the price paid to the Berwind-White Company compares with the prices paid to other companies, the Interborough has but one price. All are on the same basis.

By Commissioner POTTER:

3004 The great peak in the power load is in the morning from half after 7 until 10, and in the afternoon it is from half after 4 until 7. That is the heavy peak. We do not at all times have a substantial reserve. I happen to know, for instance, that we have a 30,000 K. W. out, because we have been taking out some of the modern 30,000 K. W's., one at a time, and sending them to Schenectady to protect against what was thought to be a mechanical weakness because of an accident to one of them in Boston.

3005 (1774) As to whether if we took coal from twenty or thirty or forty different operators, representing different preparations, different volatile, carbon, and ash content, different physical structure, and at seven o'clock in the morning we happen to hit a few carloads of very inferior coal, it would embarrass us, we have

experienced that. In the year last past, during which we had no contract, I was dependent on the cooperation of Washington, which, I may say, because of our situation as I have just attempted to outline, has always been most responsive, prompt, and sympathetic; we receive coal from various sources. We bought an enormous tonnage from Wales, and we did experience tremendous difficulty by reason of that coal. (1775) In many instances we were forced to reduce the service to the public, and until we were able to return to this high-grade uniform quality of coal for which our plants were originally constructed, we were unable to heat the cars of New York, and people had to ride in the cold, not in the coal, but we could not turn on the heat, because the heat by electricity took too much energy. We could not spare it from the tractive effort which we had to exert, and even though we cut off the heat from the cars and cut down the service we experienced difficulty, and of course the public were tremendously more crowded, which, however, compensated in a measure for the loss of heat.

By Mr. EDWARDS:

As to the company's experience with respect to coal obtained through priority orders, the effect it had upon the efficiency of our plant was as I have just attempted to outline. My personal experience in that year, after the contract when we had to appeal to Washington for help, although sympathetically extended and promptly extended, operating on a narrow reserve which we had to operate on with only one week, was nerve-racking, and caused tremendous
3006 additional expense, in that we had to over-buy in the British market. I might say that although we had coals contracted for (1776) in the American market and had cooperation from the Washington authorities to move it, had we rested our case on the coal contract and priority orders, thinking we would burn those and keep going, we would have been shut down. But we went further, as insurance, and bought British coal. Happily we did so, because that saved a shut-down in New York.

By Commissioner POTTER:

As to whether our experience has been such as to enable us to form an opinion as to whether a discontinuance of the use of private cars would force a more extensive use of emergency orders to protect us, I would try to answer the question, but our interest in private cars rests here: We have come through with private cars. We know that with this continuous flow, if 20 years behind affords foresight, that we can carry on. We do not want to change the Interborough policy. The Interborough, I might say, is besieged each day by people wanting us to test out this coupler, that kind of metal, this kind of coal, that kind of cross-tie, saying that your railroad is of standard construction, 100 pounds, American Society, 18 inches of rock ballast, and we can get results of a test so much quicker than elsewhere. They want that because we are running trains 45 miles an

hour a minute and a half part, each with 2,000 people, thereby affording the wear and tear (1777) which would give them that test, and if it stood that test, give them that recommendation which they seek; but because of the very fact that we are running trains 45 miles an hour a minute and a half apart, with 2,000 passengers on those trains, we will not try them out. We say, "Take it somewhere else and see that it withstands the test, where the damage won't be so tremendous." For the same reason we want to carry on as we have, because the bridge has carried the load. Maybe the new one will.

3007 Q. [By Commissioner POTTER.] At any rate, if the private car was done away with you would have to have your fuel from some sources, and you could not store it, and you would require it currently, and therefore you would be compelled to resort to priority orders, would you not?

A. Naturally. Either that or go out of business.

Q. (By Mr. BROWN.) Or else the carriers furnish you cars?

A. Well, the sum and substance, as I understand the question, was, we have to have coal to carry on.

We care whether it comes in private cars or railroad cars, for the reason that knowing the car is there, (1778) and knowing it is our coal, instead of having one week's reserve we have got a pipe line flowing to us. That is what we have. I might say, we pipe our coal. As to whether no matter what the car supply is, and no matter what the conditions of service, we want the private car, I would not put it that way. I know that it is and has been an insurance, and I only know one way to judge the feature, and that is by reading the past, and on that basis I will answer the question "yes."

Cross-examination by Mr. LIVERIGHT:

I only used "pipe-line" service in the sense of a continuous uninterrupted supply of coal, which we must have. We do pulverize our coal before we use it. (1779) We would not care if it came that way. It has been the equivalent of that service. Our coal from the Berwind operations is from Windsor. We got our Consolidation coal from Somerset County, Pennsylvania. On chemical

3008 analysis the Consolidation coal is not up to Berwind. It does not approximate it. In ash content there is about a point; in B. t. u.'s, about 300 points; and carbon, two points in favor of Berwind-White Eureka coal. We get our Logan coal from Cambria. (1780) They are all central Pennsylvania. It takes the lowest freight rate, and we must have low volatile coal. This is not what is commonly known as steam coal. We use Navy standard. It is superior to the common garden or standard variety of steam coal. It is also low in volatile. It is not pool 9 or pool 10 coal. It is much superior. We can not use pool 9 and 10. It is pool 1; Navy standard. It is, of course, steam coal, as distinguished from gas coal or some other varieties of coal. It is low volatile steam coal, as distinguished from high volatile steam. We can not use high-

volatile steam coal. I do not know how pool 1 got its designation. (1781) They mean nothing to me, except the classification at New York Harbor during war days. Our contract with Berwind terminated in 1922, because that was the expiration of the time. That is all. In February of this year we renewed it. From April, 1922, to February, 1923, we were without contracts, and we were sought by some people to make a contract. That was in a period of stress and strife, and we felt it was not the proper time, and you did not have the proper base. As to whether for ten months at a stretch we got along without private-car service for our coal supply, my answer is "yes." We operated in the manner in which I have described, by going to Great Britain and by seeking the cooperation of the Government and by inflicting upon a corporation which is selling ten cent service for five cents an additional cost of many million dollars, and we got along that way, but we can not permanently get along that way, because the Interborough Rapid Transit Company each year loses millions and millions of dollars, and we have got to get to the end of the bucket sooner or later. (1782)

3009 I don't remember how many tons we received on priority orders. We bought abroad about 200,000 or 250,000 tons. We did not get any from the Consolidation Coal Company and the Logan Coal Company either. All of our contracts had expired. We were without contracts. Apart from the foreign coal, we bought all we could get in Pocahontas to take the place of this contract coal, and rolled it to Hampton Roads, and brought it up that way. All I could get anywhere else I would buy and run down to Washington and tell them about it and have them get cars. Bought it in England, and had a man over there and spent money like a drunken sailor; cut the service; froze New York, and kept going on that basis. (1783) I dare say part of our troubles were due to the strike in common with everybody else.

Q. [By Mr. LIVERIGHT.] Do you think that you have had sufficient experience in getting along without private cars to base an opinion as to the effect that the failure to have that kind of cars would work upon you if the railroads equipped themselves with a safe and adequate car supply?

A. Well, that proviso is what spoils the question, to my mind.

Q. It spoils it for you?

A. I will answer you, though, very clearly, I think. What caused me to wear out the rails coming to Washington during the war was not to get priorities, because I had my coal. It was to keep the Navy Department and other Government agencies from taking it. That is what private cars did for me. They could have issued priorities for the Navy, I imagine.

Q. You are referring to the war period?

A. Yes; and shortly afterward, when they were bringing them back. It was the same thing then.

3010 M. S. SLOAN (1784), called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. WOLFF:

The Brooklyn-Edison Company, of which I am president, owns and operates properties in the Borough of Brooklyn, amounting in value to approximately $100,000,000, which is used for the generation and distribution of electrical energy to a population of something over 2,000,000 people. In our petition we point out how indispensable our service is to the life, (1785) health, and happiness and comfort of the community in which we operate. To perform this service we have spared no expense to secure a dependable supply of coal and to provide adequate storage facilities. Although we carry in storage a large amount of coal, we have learned from past experience that the maximum of assurance of a dependable supply is obtained by making contracts with responsible dealers, including those who own and are left free, under the present rules of the Interstate Commerce Commission, to use their own cars for supplementing, if necessary in emergencies, the deliveries by cars of the public carrier. We do not own any coal mines, nor do we own any cars. We consume annually something in excess of 500,000 tons of coal, and we must rely entirely upon purchases of this coal from outside sources. All of the deliveries are made by boats or barges in the harbor to Brooklyn. We have contracts with the Berwind-White Coal Company, the Knickerbocker Coal Company, the Consolidation Coal Company, and the Pennsylvania Coal & Coke Company. Berwind-White supply approximately 55 per cent of our requirements, the Consolidation Coal Company approximately 100,000 tons, the balance being divided between the Pennsylvania Coal &
Coke Company and the Knickerbocker. Our (1786) expe-
3011 rience has been, in common with that of the other facilities of
the Metropolitan district, that coal companies owning their cars are the most dependable sources of supply for the necessary quantity and quality of coal in emergencies. We passed through the priority period with contracts with companies whom we considered just as responsible as any dealers in the business, but who, by reason of the acute car situation, were not able to make deliveries of coal to us. Those companies owning their own cars were enabled, by reason of this fact, in my opinion, to deliver in excess of 100 per cent of their requirements to us. During the strike period of last year many of our contractors had varying from 60 to 100 per cent of shut-down at the mines. It was necessary for us to purchase approximately 150,000 tons of coal from England, which was delivered to us in lots of 15,000 to 17,000 tons by steamer in the harbor. By reason of the fact that we could not get the steamers to our plants it was necessary to unload the coal from the steamers onto barges and then deliver to the plants. Coal in our operations amounts to approximately 70 per cent of the cost of generation of electric energy in our operations. It is very apparent and necessary that we contract with only reliable, dependable sources of supply for a high-grade quality of coal. (1787) I firmly believe that the use of privately owned coal cars, considered from the standpoint of storage

alone, justifies any rule which insures constant use of every existing coal car. The full use of private cars relieves to the same extent the regular system cars for general use, and our experience has been that in times of great stress, where there is an acute car shortage, that we have gotten results from those companies that own and operate private cars. Our case is set forth very fully in our petition.

Cross-examination by Mr. BROWN:

3012 As to whether my theory is that our necessities and the use of the private cars is without regard to the effect that it may have upon the distribution of cars as between mines in any given district, my answer is "yes."

By Mr. FREDERICK BALLARD:

The facts set forth in this petition are true to the best of my knowledge and belief.

By Mr. LIVERIGHT:

The main feature of the service we get through the operation of these private cars is not avoidance of the need of storing coal. (1788) We store coal. We store approximately 50,000 tons of coal, which is about one-tenth of our yearly requirements. The use of these cars saves us the need of any greater storage, to the extent that it is a dependable source of supply, if that man is able, by reason of the fact that he is not shut down by strikes, to continue with his operations. It is a great economic and business advantage to us not to be required to store coal.

VAN A. BITTNER (1790), called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. BROWN:

I reside at Pittsburgh, Pennsylvania. I am the personal representative of President Lewis, of the United Mine Workers of America. (1791) The principal interest of the United Mine Workers of America, as an organization, in this case is the effect the assigned car has upon the mining industry, which in turn affects the earning power and the very life of the coal miners who are members of our organization. We find that there is nothing that causes more discontent among the coal miners than the unequal distri-
3013 bution of cars at the mines. We find that we have had many so-called wild-cat strikes and general disturbances, due to the fact that when the mine is working 100 per cent time another mine with orders to be filled can not get more than 40 or 50 per cent car supply. After a careful study of this situation made by myself and other responsible officers of our organization, we have reached the conclusion that the assigned car has done more to over-develop the coal-mining industry in the United States than probably any other one cause. I understand figures have been presented in former hearings dealing with the question of overdevelopment from

the standpoint of the coal miners of America. I simply want to submit these figures to the commission to show the actual number of days that the coal miners have work. This compilation is not taken exactly from the Geological Survey, because the reports given the Geological Survey (1792), I think can be shown, are not at all times accurate and correct. These figures are taken from the actual number of days that the miners in the various districts that I name worked. They are for 1921, because of the fact that during 1922 we had more than five months of a strike, but 1921 was more or less of a normal year in the coal-mining industry. In the Pittsburgh district of western Pennsylvania the coal miners worked 123 days in the year 1921; in Ohio, 118 days—that is, on the average—in Illinois, 159 days; in western Kentucky, 130 days; in the New River field of West Virginia, 80 days. I am taking these figures from the various districts, simply to show the spread over the eastern part of the coal-mining fields of the country. It is true that the overdevelopment of coal mines does not rest entirely on any one particular cause, but the use of the private and assigned system car has at least done more toward overdeveloping the coal-mining industry than anything else. The coal-mining industry is not over-
3014 developed in the same manner as we would speak of the general overdevelopment of an industry, due to this fact
(1793) that these coal mines that work 30, 40, 50 per cent of the time are absolutely necessary, in order that the people of the United States may be furnished with coal from commercial mines that are not furnishing coal to some industry that is getting their coal by private or assigned system cars. Our conclusions on this matter are these, that if the ruling recently made by the Interstate Commerce Commission dealing with the assigned car, both private and system assigned cars, is made effective over a certain period of time, I cannot tell just how long, the railroads as a matter of common business economy will furnish enough cars for the mines on their system. Now, the result of that will be this: When free, unrestricted competition is allowed in the coal-mining industry, as is true in every other industry, generally speaking, in the United States, then the uneconomical mine as a result of unrestricted competition will naturally go out of business in the same manner as any other uneconomical business institution that we have goes out of business, due to competitive conditions. But the use of the assigned car makes it absolutely necessary, as we see it, that we have these extra number of mines; many of them we might say are uneconomical, except under certain conditions, to operate—it makes it necessary for those mines to exist, (1794) and that is the only reason that they live at the present time. If the various mines on a railroad line were given cars, it is natural that the mines that are operated most economically could furnish the coal that is necessary. The miners would work at those mines, and the other mines that were uneconomical would go out of business entirely; not as they are to-day. To-day, as I said,

we are faced with this condition in the overdevelopment of the mining industry: Those mines that work only 50 per cent of the time do not work that 50 per cent time during the same season, be-
3015 cause, while it is true under some circumstances, more coal is used one season than another, yet the spread is generally over the entire 12 months of the year under normal conditions. We also find this condition as far as the general public is affected: Due to the use of the assigned car, especially so far as railroad fuel is concerned, a mine operates 100 per cent on railroad fuel, which gives the railroad, we will admit, cheaper fuel, but other mines that only operate 50 per cent or 40 per cent necessarily increases the cost of production at those mines, and as a result the general public is compelled to pay more for their coal than they would if the work, (1795) even, was distributed among mines that could mine and sell coal on that line of railroad. That is aside from the natural condition that I think would ensue in time, if the railroads were finally compelled, which they would be as a matter of good business, to furnish cars to the economically operated mines on their line of railroad, and we feel from investigation and experience—and we have had quite a bit of it, spending 5 years in the coal mines and in the coal-mining industry of the country—that there is no one thing that will do more to stabilize the coal-mining industry of the United States than to make effective the rule recently adopted by the Interstate Commerce Commission, because there is no question but that short time increased the cost of production; that it is generally admitted that the more days a mine works the less will be the cost of production. I think the coal operators here have admitted that fact, and the fuel administration with their experts during the war found that that was the fact, and that was generally recognized in the coal-mining industry. For these reasons the organization has taken this position relative to the question that is now before the commission. The general needs of the country are about 500,000,000 tons of coal and the capacity
3016 (1796) of the mines is 700,000,000 tons, and it is necessary, under present conditions, with the present general car supply at the mines, when coal is needed, that where we only need 500,000,000 tons of coal we have a productive capacity in excess of 700,000,000 tons, due to the fact that there is so much lost time at those mines, and the loss makes up for the difference in the needs of the country, and the general productive capacity of the mines.

Cross-examination by Mr. LIVERIGHT:

Our membership is about 576,000 members. I am assistant to the president, who is Mr. John L. Lewis, and I appear as his personal representative. He has authorized my appearance here, and the action on this question taken has been taken by our board of directors, which is the international executive board, composed of one member from each of the mining districts under the jurisdiction of

the United Mine Workers of America. That was a formal action taken.

3017 By Mr. F. BALLARD (1797):

I think that inequality of working time during the week is caused in large part by the assigned cars. There is no distinction between a private car and an assigned railroad car. I would say that generally mines using private cars, such as the mines owned by large steel companies, for instance, work approximately full time. I attribute that approximation of full working time in steel company mines to the ownership and use of private cars as it has prevailed in the past. (1798) Overdevelopment of the coal industry is the very thing that results from the practice referred to. It is true at that particular mine or mines where they have assigned system or private cars. That is the very cause of the overdevelopment of the mining industry and discontent. (1799) The cause of the steel company's mine working 100 per cent time while the other mines are only working 40 to 50 per cent is the reason we have this discontent. The cause of the 100 per cent operation at the mine where the private car is used is the cause of the overdevelopment of the coal-mining industry, due to the fact that the 100 per cent operation at the private car mine is the cause of the 40 per cent operation at the mine that does not use private cars, and as a result of that system (1800) it is necessary for the mine that works on the 40 per cent time to operate 40 per cent of the time to supply commercial coal, because the mine operating 100 per cent under a private car system does not supply commercial coal to the American public. A mine served by private cars working substantially 100 per cent time can afford reasonably contenting conditions to its labor at that particular mine. At other mines which do not work 100 per cent of the time the conditions of labor are not so contenting. (1801) Our organization objects not so much to the difference between the desirability in working conditions as the actual working conditions. We strive to

3018 reach the place where all competent coal mines would work full time. I am familiar with instances where private car mines have achieved that condition so far as their mines are concerned. I do not object to these more isolated conditions achieved at those mines. My objection, or the objection of the organization, is this: While obtaining the ideal condition for the small minority of the coal miners at that one particular mine, you create an altogether different condition at a majority of the mines where the majority of the coal miners work. I couldn't say that there is not enough coal mining to be done in the United States to supply full-time work for all the coal miners. That has never been proven. (1802) It is true that I gave some figures for 1921, showing a working of less than 50 per cent of full time. The industry is overdeveloped to that extent. We do not object to any employer of our members giving full working time to such members. We object to that employer giving

his men 100 per cent time and, in doing so, discriminating against a great body of men who do not get 100 per cent time. (1803) We have always taken the position that if the private car is abolished finally the uneconomical mine will also be abolished along with it. As to whether until that is done and so long as we are in a period of overdevelopment and over-manning of the industry our policy is to spread the available work ratably among all—it is, as nearly as we possibly can.

By Mr. BRONSON:

I stated that the overdevelopment of the mining industry was largely due to the use of the assigned cars. Personally, I was speaking for the membership that I represent, or, in other words, speaking of conditions in mining fields that I am familiar with. The same condition would apply in nonunion fields. (1804) I am familiar with conditions in some nonunion fields. I do not think the records will show that there has been a greater development of the coal industry in southern West Virginia and in Kentucky than in the North. I think the greatest development of coal mines
3019 in any part of the United States has been in the North. Southern Illinois will show the greatest development of coal mining of any field in the United States in the past seven years. That development is due to a natural condition of the coal-mining industry there. Our organization objects, if a railroad owns a mine and uses its own cars, to discriminate against miners working at the other mines. (1805) As to the difference between a mine and a railroad shop, the only question that we are interested in is the equal distribution of coal cars. We would not object to the practice of the railroads of backing up their engines and taking coal at the tipple of the assigned car mines. I haven't any objection to the railroads getting their fuel so long as they do not discriminate against the men working at the other mines on that line. If they back up all of their engines and receive their fuel from that mine and keep it running 100 per cent time and keep the other mines idle, then certainly we would object to the method of handling that coal question, unless there was a sufficient car distribution at the mines (1806) to insure steady work for the miners, or, on the other hand, if such a condition could possibly exist where the backing of the engines and the fueling at some particular mine did not in any way discriminate against the operation of the other mines. We do not make any distinction between railroad owned mines or entire output mines so far as the equal distribution of the work is concerned. As to whether we attribute the irregularity of working time at all to market conditions, we do; but, as I stated, the marketing conditions that have overdeveloped the coal-mining industry are largely due to the practice of assigned private and system coal cars, because if it was not for the fact that we have assigned system and private cars, which

causes many mines to work only 40 per cent time, and the mines were given cars to haul coal for which they had orders, the uneconomical mine would go out of business, and as a result of that market condition we would have a nearly 100 per cent working time.

3020 (1807) I obtained the figures that I quoted respecting the working time in Pittsburg, Ohio, and Illinois from various officials of our district organizations and not from any Government publication. 1921 was more normal than 1922, I would say. I would not say it was just exactly a normal year. I do not think it was a subnormal year.

By Mr. BROWDER:

(1808) I have heard the testimony in this case of various companies owning certain undeveloped coal lands. As to whether if this rule is abolished and the company requires a steady supply of suitable coal and develops either its existing mines or new mines so that in a 50 per cent car supply it will have two mines available of the same capacity as the former to give it a 50 per cent supply that condition would affect my conclusion, it would not. But our conclusions are that these coal companies would not operate or open up new mines if they knew they had to take their chances in getting cars with the rest of the coal operators in that field. Therefore it would be more economical for that steel company or whatever company it is to buy other coal in the open market than it would be for them to develop new mines, and take their chances with the rest of the operators in getting their car supply. That would be true with a company like one of the companies here having 25,000 or so acres of undeveloped coal lands. (1809) That that company may try to insure a steady supply of coal in that way and create the very thing which we wish to avoid may be possible, but it is not probable. As to whether my figures for the year 1921 include the so-called snowbird mines, wagon-bank mines, and all those that customarily operate one or two months, that included the mines in those

3021 fields. There are very few snowbird mines or wagon mines in the Pittsburg district. I haven't with me figures showing the entire tonnage produced in 1921. The tonnage is greater than 1922. As to other causes of short working days beside assigned private cars, (1810) we might have storms or weather conditions, etc. The year that I mentioned was not affected by strikes. Those were actual days the men had an opportunity to work. As to whether in 1922 our men were out of the mine more days because of the strike or because of the effect of the assigned car, the assigned car rule might have had a lot to do with the strike, because of this fact, that due to the fact that the assigned car rule prevailed at certain mines the men were not able to work more than 40 per cent time at the mines that did not have the assigned car and the coal operator was unable because of operating conditions at that mine to pay the men a wage that would allow them to live. As a

result of that economic condition in the mine, the strike came about. (1811) In the nonunion fields where no strike existed at that time, there was no discrimination between the mines as to car supply. The nonunion miners got about all the work there was in 1922. The assigned car rule, as we understand it, is a rule whereby the cars, either private or system cars, are assigned to mines in such number as will cause unequal distribution of cars at all mines on that line of railroad. I did not say that by abolishing this rule (1812) the railroads would be forced to buy cars so as to give 100 per cent car supply to all mines, including the superfluous mines. I said that in a certain length of time after the assigned car is abolished the railroads will furnish enough cars to the mines on their line to operate all the time, that they have orders for operation, which will destroy the uneconomical mines on that railroad and put them entirely out of business
3022 and give steady time to the men who work in the mines that can be operated at a profit on that line. If the railroad only buys enough cars to supply the economically operated mines on the railroad, it will do the same after the uneconomical mines are not operated as it did before. (1813) The railroad won't determine which are the economical mines. Industrial economic facts will determine that question entirely. As to whether prior to such determination my theory presupposes enough cars to handle all of them, it does not, due to this fact, that with the abolishment of the assigned car the railroad will not immediately buy enough cars to supply all the cars on the line, but during the turn-over, until they do get enough cars on the line, then the uneconomical operation mine will be out of business. I do not know whether the Pennsylvania has or has not a reasonable car supply. I know they have not furnished the mines with a reasonable car supply. Neither has the New York Central. (1814) As to the Baltimore & Ohio I do not know. As to the mines which have had the private cars, they may for some little time work the same number of days the other mines work, but, as I explained, that condition will finally cure itself and they, along with the other mines they operate, will operate full time. (1815) I gave the total capacity as 700,000,000 tons per annum of all mines in the United States. That is the productive capacity. These figures came from the Department of Labor and from the Department of Commerce. As to whether the abolition of these cars will increase the working days in the surrounding mines, that will temporarily. If it be supposed that there are only two 50-car mines on a division, each rated at 50 cars, and there are 70 cars available for distribution, 50 being private cars assigned to one mine, under the present rule those 50 cars would go to the
3023 private car mine. (1816) With respect to assuming that under my rule these cars are off the system and that each mine must split the 20 cars, I assumed that they would be left on the railroad. I assumed that, because of the fact that railroad

companies generally do not have any more cars, at least that has been our experience on the railroad, than are necessary, and it means this number of cars is necessary. The facts are that probably the railroads would buy these cars.

By Mr. MANCHESTER:

(1817) As to whether, assuming the case of a sheet mill operating under amalgamated scale which has a mine for the purpose of producing a particular quality of coal for use in its gas producers and uses its private cars solely to carry that particular coal to its plant, and assuming that in a period of car shortage by the use of those cars and that service alone it can keep both its mine and its plant operating 100 per cent and without those cars it would be necessary either to close down completely both the mine and the plant or reduce their operations to a very limited degree (1818), that practice would be discriminatory, it is our position under our form of government that every business man and every business interest can have an equal opportunity to operate without any special privileges relative to car supply or anything.

By Mr. BAKER:

(1819) I am aware of the fact that a very large proportion of the by-product coke made in the Connellsville district of Pennsylvania is shipped in identically the same open-top equipment that the railroads use for the transportation of bituminous coal. As to mines providing coal for beehive coke, I would place them in the
3024 same category as I would other coal mines. The position that our organization takes is that there shall be no discrimination as between coal mines. What they do with the coal after they take it out of the mines is a question of operation entirely. The only car service that is involved to a beehive coke oven mine is car service to remove the coke from the oven to the market.

By Commissioner POTTER:

(1820) I am quite sure that if assigned and private cars are abolished in time that would result in the closing of the high-cost mines. That is the conclusion we have reached after sincere thought and study of the matter. I mean the organization and myself personally. As to whether that is Mr. Lewis' position, it is not his position. It is the position of the several officials who make up the official family of the mine workers organization, some four or five hundred officials. (1821) We are not so much in favor of closing the high-cost mines, but the main cause of closing the mines that are uneconomical to operate would result in those mines being finally closed down and give our people steady work at the mines that remain in operation. I said that the effect of abolishing the assigned private car would be to close the high-cost mine, and that is the reason why private cars and assigned cars should be abolished. I think the car equipment of the country should be so handled as to accomplish that end. (1822) As to whether, supposing the pres-

ent system of mine ratings be abolished and cars be distributed not according to mine capacity but according to consumers' needs and desires, and supposing the consumers be regarded as the shippers of coal to be looked after and not the mines and the cars be
3025 placed wherever the consumers want them placed, the result would be that buyers would buy their coal at the low-cost mines, the equipment would be used there, and the high-cost mines would close, I don't think so. The 700,000,000 tons of coal I mentioned is in round figures.

3026 (1823) The productive capacity of the mine, as it is generally understood, is the amount of coal that that mine can produce with the number of men they have employed if given 100 per cent car supply. I would not say that they could not develop that to a billion, but these figures I have show 700 million. (1826)

Nov. 1, 1923.

By Commissioner POTTER:

The number of days I referred to as the days worked in 1921 was the number of eight-hour days that the miners in those various districts had the opportunity to work. When the mine was running the full eight hours, the miner had the opportunity to work if he desired to work that number of days. I have had practical experience in mining. (1827) The general system of operating a coal mine where the coal is undercut by a machine, at least so far as our particular district is concerned, is that the men work in one place until they have two or three places. They clean up one place at a time, so that they always have a full supply of coal and a place that is cleaned up for the cutter when he comes in to cut the coal. That is under good mine management. We have always contended for that, because of the very fact that if you had the system of mining (1828) whereby a man would come in and would only have two or three mine cars of coal left, the men would never get steady work. It has been the contention of the mine workers' organization in their several joint conferences since the inception of the mining machine to so regulate that matter that the coal supply for the loader will be kept as regular as it is possible to do it. We have no objection to make to the management of mines under those conditions, when they furnish our people with enough mine cars to give them a day's work under practical conditions and are furnished in accordance with the agreement we have with the operators
3027 to furnish them. (1829) I last worked in a mine in 1908 at Cherry Valley, Washington County, Pennsylvania. The mine system there was electric undercutting machines. They did not undercut there at night. The system was that two men at that time had two places. Our contract with the coal operators called for two men to work in one place together until they cleaned that place up, and it was so regulated that one place was just about all that two men could load out. It was considered a good day's work, and the

cutter did his cutting in the daytime. (1830) 99 per cent of our cutters cut the coal at that mine in the daytime, and due to the fact that two men had two places, in one of which they could work under our agreement with the operators until they cleaned it up, there was always one place that those two men worked in for the cutters to cut in that particular day. It is the general practice to undercut coal in the daytime in the bituminous field. In saying that a mine is running on a certain day I did not mean to say that all of the rooms were worked on that day. They do not work all the rooms in any mine at any time. It is not practical. They only work half the rooms in a mine on the day the mine operates. That is due to the fact that it is practical operation. It is not so much a question of undercutting during the daytime. (1831) It is a question of keeping the miners in coal; even if they undercut at night, it would not make any difference. I have never calculated the developed capacity of the mines on the assumption that coal would be undercut at night in each room, mining cars to be furnished to load out that coal the following day, and a clean-up made each night. The only method that we have calculated the capacity of mines on is what is considered in the mining industry as a prac-
3028 tical method of coal mining. (1832) I have calculated the capacity of mines, assuming that the miners had a full mine supply and that the coal was undercut at a time when they wanted it undercut. (1833) On that basis we figure the capacity would be somewhere around 700,000,000 tons.

By Mr. LIVERIGHT:

It is true that there is a statutory regulation in gaseous mines that shot firing must be done after the men have quit work. That does not obtain generally in Pennsylvania. It does in Ohio, Indiana, and Illinois. In these other States the shot firing is done either at night or after the miners have quit their day's work.

By Commissioner POTTER: (1834)

That is not the universal practice. I would not think it is the practice in West Virginia or in Virginia. I know it is not the practice in western Pennsylvania. In the Pittsburgh district we have shot firers who shoot the coal during the eight hours that the miner is in the mine, generally. While that condition is regulated in accordance with the supply of coal for the miner, it is sort of changeable at each and every mine in the district. There are no conditions exactly alike, due to the nature of the coal. (1835) If the production in 1921 was about 400,000,000 tons of coal and the total possible production 700,000,000 tons, it would prove that the coal-mining industry was run inefficiently, due to the railroad car supply. The management of the mine plays a certain part in it. In some instances I think it is in collusion with the railroads relative to car supply.

By Director BARTEL:

In certain instances there was not a shortage of cars in 1921. The shortage may not have been general, it is true.

3029 By Mr. BRONSON: (1836)

There was irregularity in working time due to the assigned car, causing the overdevelopment of the mining industry.

By Commissioner POTTER:

Our 700,000,000 figure, as I understand it, means that 700,000,000 tons of coal could be produced (1837) with the number of men now engaged in the mining occupation if those men who are now engaged in the mining occupation were allowed to work to the full capacity of the mine the number of working days there are in the year, as the mine is now developed and operated. The difference between the 400,000,000 tons mined in 1921 and the 700,000,000 theoretically possible represents the percentage of inefficiency. We charge that to the railroads. Under a local condition it is true that the condition of the market accounts for irregularity of working time in mines more than assigned cars, but getting back to the overdevelopment, that is due, we charge, to the assigned car. (1838) The price of coal has something to do with the sudden springing up of mines on a railroad. If coal is mined under economical conditions made possible by a free and unrestricted competition, that condition would not exist, because a man would not open up mines just to run for one or two months while the coal price was high. They do not do it, generally speaking. As to the figures I gave showing the working days in mines in 1921, they demonstrate the actual time in comparison with the time they should have worked.

C. A. RICE, (1839) called as a witness and having been duly sworn, testified as follows:

3030 Direct examination by Mr. CURRY:

I am statistical analyst of the bureau of service of the Interstate Commerce Commission, and in that position regularly receive reports of the American Railway Association concerning car distribution and other matters. I have had prepared under my direction and supervision an exhibit showing car distribution, and it is correct. (1840)

(The document referred to was offered and received in evidence as Exhibit No. R–37.)

The exhibit applies to the Baltimore & Ohio Railroad Company, the Pennsylvania Railroad system, the Norfork & Western, the Chesapeake & Ohio, and the Louisville & Nashville. The statement is entitled "Cars required, cars placed, and percentage of requirement placed at bituminous coal mines," and covers the period from March 1, 1920, to October 13, 1923. The cars placed include all cars placed at the mines for coal loading. (1841) There is a note at the bottom of each statement explaining what each item means.

Cross-examination by Mr. BRONSON:

The percentage of cars placed is based upon the orders, and that in turn is governed by the rating.

By Mr. BROWN:

As to the fifth sheet showing that in March there was 282 per cent of cars required, (1842) that means they put in there 182 per cent more cars than were asked by the mines.

By Director BARTEL:

These figures were merely taken and compiled from the figures furnished to the car service division of the Interstate Commerce Commission by the American Railway Association.

3031 By Mr. LIVERIGHT:

As to whether cars placed include cars counted more than once because they lay over at the operation, that is covered, as I understand it, by the mine rating rules. Whatever the mine rating and distribution rules prescribe, they would be placed in that manner.

ARTHUR N. PAYNE (1844) called as a witness and, having been duly sworn, testified as follows:

Direct examination by Mr. BRONSON:

I am connected with the Associated Industries of Massachusetts. I am authorized by the president of the Associated Industries of Massachusetts and the chairman of the transportation committee of that association to appear here in support of the contentions of the railroads for the right to have at all times the unrestricted use of their own cars for loading with railroad fuel. This practice (1845) has been in existence for many years, with the exception of the period of Federal control, as we understand it, and is assumed by us to be the best plan which has so far been followed to accomplish that purpose and to insure a constant supply of locomotive fuel to the railroads of the required quality and secured at a reasonable price. The industries of New England are so entirely dependent upon the railroads that anything which interferes with the honest, efficient, and economical management of the railroads must react unfavorably upon the industries. What the manufacturers want is a settled policy—to do away, in so far as possible, with the element of uncertainty. I believe that if the railroads have not a steady, constant flow of fuel for their locomotives the industries themselves can never be sure of their own fuel supply; that is, they will be liable

3032 to have their own cars of fuel confiscated after they have started and will have to go into the spot market to buy coal, which will certainly subject them to higher prices. The Associated Industries of Massachusetts is composed of the majority of the manufacturers of the State, and the membership at this date is 1,557 members. (1846) That means firms, corporations, partnerships, etc., practically entirely manufacturers interested in bringing in the raw products into the State and shipping out the manufactured articles.

Cross-examination by Mr. BROWN:

It is a serious matter to every industry if it does not get its coal and has to close down. There is a considerable amount of coal that comes into Massachusetts by water (1847), particularly for those industries located at or in the vicinity of ports. Some of the railroads, I believe, get their coal by water at certain times. I do not know the amount.

By Mr. GREEVER: (1849)

Our general manager's report issued this month gives the capitalization of the 1,557 members of the associated industries as 72 per cent of the entire capitalization of manufacturers in Massachusetts. I have not the figures at hand as to the number of manufacturers, aside from the question of capitalization.

By Mr. GREEVER: (1849)

I have not the figures at hand as to how much coal is brought into Massachusetts by rail and used by the people I represent. (1850) A very small amount of coal as used in industry, in manufacturing, is anthracite. The anthracite our people use is negligible.

3033 By Mr. BRONSON: (1851)

Coal that comes into Boston, Providence, and other port cities all the way from Hampton Roads, Baltimore, Philadelphia, and Jersey City is to a large extent moved to our industries in coal cars, except what is used in the ports. A large amount of such coal is moved inland. I think those railroads ought to have the unrestricted right to use those cars in moving that coal from the ports to inland industries. (1852) A manufacturer who employs two men would be more apt to patronize his local retail dealer. The industries I represent largely buy their coal in carload lots and have it shipped in.

CHARLES O'NEILL, called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. LIVERIGHT:

I am secretary Central Pennsylvania Coal Producers Association, and have held that position about five and a half years. (1853) I have been in the coal industry as a miner and associated in the industry as an operator about 25 years. I was associated with the fuel distributor, district representative in Pennsylvania, during the war, and was production manager for that district. I was secretary to Mr. Peale, one of the members of the bituminous coal commission of 1920, while that commission was sitting. I have had experience in the mines and have been over our district for 25 years, and have some general knowledge of the characteristics of the different seams that are operated there and different qualities of coal. To look after the question of car distribution to the operators of the central Pennsylvania district is part of the regular routine
3034 duties of our office and association. (1854) I check up matters of car distribution with the railroads. We keep in

our office a record, a daily distribution sheet, of all the cars distributed by the Pennsylvania to all the mines in our district. Cooper coal is what is known as pool 10 coal in our district, pool 10 coal being a coal running from 22 to 26 in volatile matter, a low-sulphur, low-ash coal. Of that particular coal there is over 14,000,000 tons mined in a peak year in our district. Of the high-grade, low-volatile coals in our districts, including pools 1, 9, 71, 4, and 10, we mined, in the year 1920, 23,000,000 tons, as classified by the Tidewater Coal Exchange (1855) and we had 13,700,000 tons of unclassified coal mines of which about 6,000,000 would be equal in character and quality to those pools, making a total production of high-grade, low-volatile coal in the central Pennsylvania district of about 29,000,000 to 30,000,000 tons in that year. According to the Geological Survey of the State of Pennsylvania, the figures compiled by Major Reese for the State, there is estimated to be in those counties producing this character of coal about nine billion to ten billion tons unmined. The district covers an area of about 4,000 miles, about 13 or 14 counties in the central part of Pennsylvania. The entire 29,000,000 tons which was produced in 1920 is all classified and is considered superior to the Bethlehem Steel coal mined at the Penn. Mary mines in Heilwood. (1856) Those mines are classified in pool 11, which some of the private-car owners here refer to as the cats and dogs. As to the Johnstown coal used by Bethlehem Steel, Johnstown is a fair grade, low-volatile coal, good coal, and comes within the general character of the coal in the 29,000,000 tons I have talked about and in the classification in which there are approximately nine billion tons estimated as unmined. I have a memorandum

3035 showing the number of privately owned coal cars that were reported in June, 1923. The information from the June Equipment Register shows a total of 29,034 privately owned coal cars, and since the June Equipment Register I know of 500 more cars that have been delivered to the Emmons Coal Mining Company which are not included in the June Register, making a total of 29,534 privately owned coal cars which we know about (1857) in the United States. The number of privately owned cars that operate in central Pennsylvania district is: Berwind-White Coal Mining Company, 3,141; Bethlehem Mines Corporation, 3,935 ownership; Public Service Electric Company, 600; Pennsylvania Coal & Coke Corporation, 1,000; Emmons Coal Mining Company, 500; or a total of 9,376, or 31.7 per cent of the total privately owned coal cars in the United States. They customarily and constantly operate in our district. In 1922, the central Pennsylvania district produced 8.5 per cent of the total coal produced in the United States. The estimated production for 1923 is 9.5 per cent. There have been complaints made to our association since September, 1922, about the conditions brought about as a result of the use of privately owned cars and assigned railway fuel cars. (1858) There were serious complaints from many, many operators, and the associa-

tion was in constant conference with the Pennsylvania Railroad officials and with representatives of the Interstate Commerce Commission because of the conditions obtaining from September 15, 1922, through until April 1, 1923. Many operators complained of the car service and the distribution which was afforded by the Pennsylvania Railroad. The complaints were that some mines were getting 100 per cent car distribution on days when commercial mines were not getting any. There were complaints that as a result of the method of distribution used the costs of production in the mines that were not getting the preferential service were increased; they were losing their labor to the mines that were
3036 working every day, disrupting their organization, and bringing about general discontent in the community. That obtained both with respect to distribution of privately owned cars and railroad-fuel cars (1859); the same in both cases. It obtained as to competitive operations with those of the Clearfield Bituminous Coal Corporation. The C. B. C. is the coal supply for the New York Central. The commercial operations are practically contiguous to the C. B. C. mines. For instance, the Bar Slope of the C. B. C., which supplies fuel coal to the New York Central, is in the town of Dixonville and is surrounded by mines owned by the Empire Coal Mining Company, the Peale, Peacock & Kerr Company, the Citizens Coal Company——. As to the competitors of mines to which privately owned cars go, we have, on the South Fork Branch, where the Berwind-White cars usually supply the Berwind mines, the Henrietta Coal Mining Company at Dunlo, a commercial shipper; the Mountain Coal Company at Dunlo; the Wright Coal Company, at Windber and Scalp Level; the Boucher-Cartwright mines at Beaverdale; the Stineman Coal Mining Company, South Fork; the Riverside Coal Mining Company at South Fork; the Argyle Coal Mining Company at South Fork. (1860) There were complaints from practically every one of those operators. As to whether they have as high a type of coal as Bethlehem mines or Berwind-White, all of the B coal that is mined in the South Fork branch is exactly the same as Eureka coal; it is the same seam, the same basin, and there is no difference in the coal at all. That is all bunk, that difference. I have investigated the reports of the carriers to the Interstate Commerce Commission showing the performance of freight-car service for 1920, 1921, and 1922 and the car-miles per day. I visited the Bureau of Statistics and looked over the reports for certain carriers and saw the original signature of the officer. I made the examination with respect to the Pennsylvania Railroad, Philadelphia & Reading Railroad Company, Lehigh Valley, Western Maryland, Buffalo, Rochester & Pittsburgh, and Louisville &
3037 Nashville. (1861) I have made up a statement from those reports, showing the straight transportation miles made by those various carriers in the several years mentioned.

(The statement referred to was offered and received in evidence as Exhibit No. R–38.)

I have a statement which is an estimate of the soft coal consumed in the United States and exported in a year when industry is going at full speed. It now requires about 550,000,000 tons to care for domestic users of bituminous and to meet (1862) the present demand for exports, according to Messrs. Tryon and McKenney in the Coal Age, January 19, 1922, page 85, compiled from data of the United States Geological Survey. Messrs. Tryon and McKenney are employees in the United States Geological Survey. The exhibit I have is the compilation that has been made up showing the types of consumers of soft coal in the United States.

(The statement referred to was offered and received in evidence as Exhibit No. R–39.)

The Pennsylvania Railroad has been issuing bulletins between September, 1922, and April, 1923, with relation to car distribution as to both the eastern and central regions. The eastern region of the P. R. R. includes the lines of the Pennsylvania system (1863) from Altoona east to New York, and the central region is west from Altoona to Crestline, Ohio, on the Panhandle division, I understand. I have compiled an exhibit based on these bulletins from September, 1922, to April, 1923, showing the total car distribution, both assigned and unassigned, over that period and also what the distribution would have been if assigned cars had been eliminated and the percentage of increase that would have resulted by distributing
3038 all the cars pro rata. The term "assigned cars" in the exhibit includes private cars.

(The statement referred to was offered and received in evidence as Exhibit No. R–40.)

(1864) The column showing total cars required is a consolidation of the figures taken from the Pennsylvania Railroad figures for the months designated in their eastern region and central region bulletins and is the mine rating or order, if less than rating. The second column is the assigned cars available during that period for distribution to assigned-car mines. The third column is the unassigned cars available for distribution among the mines. The fourth column is the total cars available, including assigned and unassigned. The fifth and sixth columns show the relation of assigned cars available to unassigned cars available during those periods. Taking the month of September, the figures 25.54 and 74.46 are indicative of the total of 165,016.7. (1865) In September there were 42,147 assigned cars available or 25.54 per cent of the total available, and in the peak of the car shortage, which was reached in February, there were 61,795 assigned cars available, as against 32,485 unassigend cars available, and the percentage of assigned cars of the total available was 65.5 per cent, or two out of every three cars placed in the eastern and central region of the Pennsylvania Railroad were placed at assigned-car mines. If all

the cars had been distributed on an even basis, the distribution would have been as indicated in the tenth column of my exhibit. (1866) The increase in the commercial distribution thus resulting would have been the percentage indicated in my 11th column. There is no separation in the bulletins of the Pennsylvania Railroad between railway fuel assigned cars and privately owned assigned cars. (1867) This is taken from the report of the American Railway Association conference committee filed with the United States Coal Commission on June 1, 1923, and reads as follows, page
3039 35: "'Coal car shortage,' while a term generally used, is commonly a misnomer; 'Transportation shortage' would be more exact or more properly descriptive. From the viewpoint of the mine management a 'car shortage' exists when cars are not placed on mine tracks in sufficient quantity to fill car orders. (1868) From the viewpoint of the railroad management the situation may rather be considered a 'transportation shortage,' for at such a time there may exist no 'car shortage' on the railroad as a whole. That is, even though all car orders are not filled, there may be in the road's possession as many coal cars in the aggregate as in previous periods when the mines it served loaded a greater amount of coal and the needs of such mines for cars were more adequately or fully met.

"When labor disturbances cause abnormal demands for coal to be delivered in certain sections of the country within a certain period, the coal moves to meet these demands via routes and gateways in quantities far above the normal, or average, movement through such channels and also via unusual routes. Because of this abnormal coal movement, yard tracks, main tracks, terminals, lake and tidewater piers, and various other facilities become overtaxed or congested, with a consequent slower movement and longer turn-around of cars. This results in what the mine management terms a 'car shortage.'"

(1869) I had a conference with the director of the Bureau of Service of the Interstate Commerce Commission some time in January, 1923. It was after a telegraphic request of the director, Mr. Roth. Those who participated in that conference were the director, and Mr. Troxel of the Panhandle Coal Operators' Association and myself, and several other gentlemen whom I can not
3040 recall at this time; Mr. Deasy, assistant chief of freight transportation, Pennsylvania Railroad. The question of car shortage and the difference in the overs existing on the Panhandle division of the P. R. R. as against the shorts on the Pittsburgh division, west end and east end, was the primary cause of the discussion. During the conference Mr. Deasy was forced to admit (1870) that the distribution in the central region was greatly out of line, and that the Panhandle operators had received cars greatly in excess of their share as compared with the other divisions in the central region, but that it came about because of an operating condition on

the Pennsylvania Railroad. Mr. Deasy, in explanation, said that when the coal strike came on April 1, 1922, the union mines in Pittsburgh and in central Pennsylvania were all, of course, closed down, and in addition to that many of the nonunion mines on the Pennsylvania lines in Pennsylvania were closed down by the strike order, and that as a result of the strike there was idle on the Pennsylvania lines in the central and eastern region about 40 per cent of their motive power; the shopmen's strike commenced on July 1, with the result that in several weeks many of the other roads were severely affected by the shopmen's strike. The 40 per cent motive power which the Pennsylvania Railroad had idle up until that period was immediately put into service to take care of the traffic that was offered to the Pennsylvania Railroad which could not be handled by other roads during that shopmen's strike, with the result that when the coal miners' strike ended in September the motive power (1871) on the Pennsylvania Railroad was in bad shape, their shops having been affected east and west of Altoona very seriously, their Altoona shop being the only one that had stood up real well. They had plenty of cars available if they had the motive power
3041 with which to move them; that it was a question of motive power with them. They had placed on order for 375 freight locomotives with the Baldwin Locomotive Works. They were building two hundred and some passenger locomotives in their own Altoona shops, and they were not building cars, because if they got the locomotives the locomotives would make cars. The movement in car-miles to-day that they could increase the movement with sufficient motive power would create cars and give them ample service at the mines. In the spring of 1923 deliveries were beginning with the locomotives, and by the middle of June, to all practical intents and purposes, the car shortage was over, when they got motive power. It existed very severely from October, 1922, to April, 1923, and sometimes after that not so severely. With respect to the (1872) Pennsylvania's receiving empty cars offered it by the eastern region, I had information from officials of the P. R. R. at Altoona that on a number of days the central region was unable to take the empties that were offered to them at Altoona by the eastern region for lack of motive power. I do not wish to give the name of the official that gave me that information.

By Mr. BRONSON:

That was a considerable number of days, intermittently. It would come one day in the week; Monday they might be able to take them and by Thursday they could not. That was over the entire period of car shortage.

By Mr. LIVERIGHT: (1873)

The general practice in gaseous mines now, not by law, but as a result of regulations of the State department of mines which have been put in because of several recent explosions and agreed to by the

operators in the western section of the State, is that the shot firing is done after the men leave the mines, and the coal, therefore, is cut in the day, because the miner must prepare the shot, and after he leaves, the shot firer comes along and fires the holes. I know
3042 people store coal. I am not an expert on storage. (1874) I never have stored any except enough to take me through the winter in my own house. While I do not burn as much as the Seaboard By-Product Company, I need a little and I like it regularly and of uniform quality and a dependable supply. I do not ask for any assigned cars for it. I take my chances with the rest of the dear public.

Cross-examination by Mr. BRONSON:

There was no particular reason for picking out the six railroads shown on my Exhibit No. R–38, except that they were railroads over which a considerable number of the private cars move, as to which testimony was given with respect to their mileage performance. (1875) I did not examine the statistics of other large coal carriers to see how they worked out, except, I believe, the Illinois Central. We did not consider it involved our proposition.

By Mr. LIVERIGHT:

The figures for the Illinois Central were slightly better than these.

By Mr. BRONSON:

I did not look at the Chesapeake & Ohio figures.

By Mr. F. BALLARD:

(1876) Exhibit R–38 includes all freight transportation, including special and mixed traffic. The figures shown are average car-miles as reported by the carriers in their monthly reports to the Interstate Commerce Commission. I understand they are car-miles under revenue loads. I suppose the total car-miles moved under revenue load are divided by the total number of days to get the average. That is a copy from the carrier's own report, and how they arrived at it I am not quite sure. I would say that the
3043 total number of days used as the divisor are the days the cars are on the line. I am not sure whether they would include free time for loading and unloading. (1877) With respect to my Exhibit R–40, the Pennsylvania Railroad grouped assigned fuel cars and private cars under the designation "assigned cars." We could not, from their bulletins, make a separation between those two classes, but we can furnish in this hearing the actual performance on private cars and railway-fuel cars on the divisions in our district, which will include South Fork, Crescent, and Pittsburgh division, east end, as we did in the hearing for the year 1920, on car shortage. We did not do it (1878) because we thought it was simply cumulative testimony, and the performance in the 1922 and 1923 car shortage will be even a worse showing so far as distribution by the railroad is concerned than that in our exhibit in the 1920 shortage. In compiling Exhibit R–40 we did not separate

the private cars from all assigned cars. We do not consider them any different. There are about 900,000 open-top coal cars in the United States. There are about 30,000 privately owned cars and if the percentage operating in our district would be—it is not—in the same relation as private cars (1879) are to the total of the United States it would reduce those figures probably three per cent in distribution, if you eliminated that. I mean column ten, distribution of all cars. Column No. 10 is the percentage that the total cars available in column four bears to the total cars required in column No. 1, and if there are private cars in column No. 2 they are included in that percentage. I have never operated any steel plants or any by-product coke ovens. (1880) I do know this much about this uniformity or quality, that that changes with the necessity in times. There was a time in the United States when the people thought they could not make gas unless they got coal from England and Virginia, down around Richmond. As to the 31.7 per 3044 cent private cars I referred to, I would say that practically all of that per cent except such of the Bethlehem cars as may not operate there do operate in our region. (1881) My information is that the 3,975 cars of the Bethlehem operate in the central Pennsylvania district all the time.

By Mr. GUTHEIM: (1882)

When I ascertained these car-miles per day I did not observe whether there were any instructions to the carriers as to how they should compute that information. As to whether the cars that are figured in the computation include cars that are moving or cars standing still under load or awaiting movement empty at terminals, I don't know the rules under which they made that figure up. I know it is a standard figure which is used to designate and to report operations of the carriers. (1883) I would say that bad-order cars are not included in the computation.

"Mr. GUTHEIM. I suggest, Mr. Director, that to make this exhibit mean anything, either by itself or for comparative purposes, that information from the commission's report should be included, which shows the basis of the computations. There is a vast difference in miles per car per day, based on how the figure is computed, and, as I recollect, the annual report of the commission states in great detail to the carriers just how the report should be computed.

"Mr. BROWN. We have no objection to reference by each of us to rules of the commission with respect to the compilation of that movement.

"Mr. NORTHCUTT. We assume that the commission will take official or judicial notice of its own rules as to reports.

"Mr. FREDERICK BALLARD. We have no objection to either attorneys referring to that.

"Mr. NORTHCUTT. So far as we are concerned for our purposes, you can put one of the blank forms in evidence. We have nothing to conceal. (1884)

3045 "Director BARTEL. The commission will take judicial notice of the report required to be filed by law."

By Mr. GUTHEIM:

I do not recall whether there was anything in this Coal Age article of Mr. Tryon and Mr. McKenney that showed the year for the basis of consumption.

By Mr. NORTHCUTT:

The net requirements for the commercial coal are shown in column seven of Exhibit R-40.

By Mr. GUTHEIM: (1885)

I am not sure that we can deduct the figures in column seven from column one and the balance will represent requirements on the assigned basis, because the net requirements and the difference between the assigned available does not always check up. That is because of some internal adjustment in the railroad records that we can not follow and they can not explain. As to whether this period, September, 1922, or any of it was in the period when the commission said that the use of the assigned car was incompatible with service order No. 23, I think that is right. I think the Pennsylvania Railroad started to place cars for fuel about October, 1918 [sic]. I don't quite recall that but I think that is about right. We have altogether about 980 mines in the central Pennsylvania region. (1886) In 1920 our production was 58,172,416 tons; in 1921 it was 39,163,074. I am quite sure that all of the private cars that come into the central region operate on one railroad. There are not any on the New York Central. As to the Windber and Scalp Level region, I think the entire branch will load at full capacity about 800 cars a day. When Berwind was going full, he loaded about 300 of them. He is only loading about 200 of them now. (1887) As to the mines other than Berwind's, I can not give the names and the rated capacity.

3046 I can get them very shortly. It would be a physical impossibility to give the mines located on the South Fork by name and owner and rated capacity, but I will furnish this information later. (1888) I do not distinguish between the South Fork and Windber and Scalp Level. That is the South Fork district of the Pennsylvania Railroad; Windber and Scalp Level are towns on the South Fork branch of the P. R. R. There is no difference in the field at all. It is the same railroad branch, the same division. These mines I am talking about have cut into some of the Berwind mines and there could not be very much difference in the coal.

By Mr. BRONSON:

With respect to the car miles figure of the Pennsylvania Railroad, 1920, this figure was taken from the column headed "1920" in
3047 the Interstate Commerce Commission records. (1889) It is one taken verbatim right out of the record, copied across line 32 of the report. It is from the monthly reports.

By Mr. BROWDER:

We had a serious shortage of labor in our field in 1922. The United Mine Workers sent them all out. They went on strike. They do not shift around from field to field. They stayed right there until the strike was over. As to shortage of labor, when everybody comes in and wants to buy their coal all at once, we do not have enough. Then when they do not buy coal, we have too many. (1890) We have too many men in the industry if they work every day. The way they work now, due to the assigned car as one of the contributing causes, we do not have enough men at the mines. (1891) When we are working three days a week we have not enough men to supply everybody with coal from our district. With 55,000,000 tons in central Pennsylvania I would say it would take five days a week. In 1921 we produced in our district at least 39,000,000, I think; in 1920, 58,000,000, and in 1922, 34,000,000. (1892) The car shortage was finally eliminated about the latter part of August of this year. The new engines I spoke of went into operation before that. I don't know as to all of them. They were being delivered from time to time, so many each week, by the Baldwin Locomotive Works, and as locomotives were delivered, the car shortage kept decreasing until they had reached the turning point. I would say that the easing up of things was due to the receipt of the locomotives, because I think the highest month's production that we had this year was the month of August in our district. (1893) We operate our mines in both the eastern and central regions, and they are the two biggest regions of
3048 the P. R. R., so I suppose it got their share of these locomotives. With the addition of these locomotives our car supply increased, and our troubles decreased until we got to 100 per cent car supply. I can not answer as to whether now that we have those engines we expect to have any more trouble of that kind. The abolition of the assigned car and the use of it [motive power] will help to avoid such terrific shortages as we have had in the past.

By Mr. GUTHEIM:

When these engines were operating the assigned car was still in effect. When you have 100 per cent car supply there is no such thing to all practical purposes as the assigned cars. There is no discrimination in the distribution.

By Mr. LIVERIGHT:

(1894) There has been a decline in the demand for coal since September. The loading in our district has dropped from 3,000 cars a day to 2,300.

By Mr. BROWDER:

I said the car shortage was not serious by June, but it was eliminated about September 1 altogether. (1895).

"Q. (By Mr. BROWDER.) Have you ever had a shortage like that before in your district, shortage of engines?

"A. Shortage of engines?

"Q. Yes; such as you had during the shopmen's strike?

"A. I don't know that as a matter of fact. I can't answer that question. I can't say whether it was shortage of engines, cars, tracks, terminals, congestion at junctions, etc. Any of these things may cause a shortage at the mine. We have had plenty car shortages before this.

3049 "Q. But you don't know, as a matter of fact, whether there was ever a car shortage in your district caused by lack of motive power, aside from this once which you have referred to?

"A. Well, I am not qualified to answer. I suppose there has been motive power shortage and car shortages and every other kind of shortage before.

"Q. But you don't know whether or not there has been one before?

"A. I don't know."

(1895) I can't name all of the people in our district who are shipping bunker coal. Some of them (1896) are Berwind-White, the Pennsylvania Coal Company, the Sterling Coal Company, W. A. Marshall & Company, Thorne-O'Neill & Company, and J. H. Weaver. All of them ship at times to New York, Philadelphia, and Baltimore. They are not all located in the same divisions or on the same railroad. The Sterling Coal Company is located on the Cresson division, Berwind-White on the Tyrone division, "and the South Fork district for the other companies." The Thorne-O'Neill Company is located on the Pittsburgh division, east end, Pennsylvania Railroad. W. A. Marshall & Company is located on the Cresson division; J. H. Weaver & Company on the C. & I. Railroad. There are other bunker shippers. The South Fork Coal Mining Company is located in the same car service division as Berwind. That is one of the Sterling companies. (1897) I suppose Steinman sells bunker coal. He is on there. The Pennsylvania Coal & Coke sells bunker coal. He is on the same division as Berwind.

By Director BARTEL:

J. H. Weaver & Company are on the C. & I. Railroad.

3050 I am not qualified to say whether they have an interest in that road. My information is that they have 60 per cent interest. The railroad owns something like 3,400 or 3,500 cars. Those cars are not used as private cars of the Weaver Coal Company. They are distributed among all the mines on that railroad, and there are other interests on the C. & I. I would not consider them private cars.

By Mr. BAKER:

The 900 mines in the central Pennsylvania district are tipple mines. (1898) Of our production of 58,000,000 tons in 1920, I think about 600,000 tons was wagon coal. I don't think those wagon-loading mines are still operating. As to how far west our jurisdiction goes, we extend to Blairsville, substantially the western limits. My Exhibit R. 39 contains all my information as to the subdivision of types of consumers. I understand coal consumed in the generation of electricity for interurban and urban railway service is included in public utilities under public utilities commissions. I understood from conversation with Mr. Tryon that all public utilities (1899) under public service commissions were included in his description of the consumption of coal as public utility. Coal used in the coke plant of a steel plant would be [under the heading] "by-product coke." The same information is the basis of my understanding. (1900) I interrogated Mr. Tryon only as to public utilities. I did not say that the Pennsylvania Railroad representative in this conference with the director of the car service bureau said that the cause of the locomotive shortage at Altoona had been because they had sent engines to help out on the Panhandle and other railroads. "I said that the Panhandle mines had received a greater car supply than the
3051 other divisions in the central region and that as an explanation of their troubles in this distribution—why some mines were so far ahead and others were so far behind in the distribution of available cars—different divisions in the same region—he made this explanation about locomotive trouble" all over their system. The locomotives that were purchased (1901) were for the entire Pennsylvania Railroad system.

By Mr. LIVERIGHT:

As to people supplying bunker coal without private cars, Sterling Coal Company supplies it without private cars; the South Fork Coal Mining Company supplies it without private cars; J. H. Weaver & Company supplies it without private cars; the Pennsylvania Coal & Coke Company did up until this year supply lots of bunker coal without private cars. All the companies except Berwind-White, that I mentioned, and dozens of others, do so without private cars.

(1902) "Q. [By Mr. LIVERIGHT] Do I understand you to mean that the 10th column [in Exhibit R-40] would be reduced by 3 per cent if the private cars were eliminated from the distribution of all cars, assuming that the same number of private cars were in use on the two regions of the Pennsylvania Railroad as the proportion of private cars to total car ownership throughout the country?

"A. That is right; it would be reduced about 3 per cent.

"Q. And if the percentage in use in that particular district is greater than the 3 per cent, it would be reflected by a further reduction in the distribution in column 10?

"A. Yes."

By Director BARTEL:

I can not answer offhand how much the percentage would be
3052 reduced if I eliminated foreign railway fuel cars from assigned cars. (1903) The number of assigned cars for foreign railway fuel in my district fluctuates very much. It is as high as 150 cars a day—more than that. I am talking about the Pennsylvania Railroad. We have a lot of cars that some of these foreign roads thought they were assigning and delivered to such roads as the B. R. & P., and which are not assigned at the mines in accord with its rule. They are distributed in the general distribution of the B. R. & P.

"Q. [By Director BARTEL.] What I have reference to is this; if some foreign line sends its own coal cars to the Pennsylvania Railroad, eastern region, for loading with railway fuel, if those cars were deducted, how much would your percentage of distribution change?

"A. Oh, I would say not over 1½ per cent.

"Q. That is, going on the assumption that if these cars were not assigned, they would not be there?

"A. In my opinion, not over 1½ per cent."

C. B. BOYD, a witness previously called, testified further as follows: (1904) Although I am traffic manager of the Hazard Coal Operators' Exchange, the Harlan County Coal Operators' Association, and the Southern Appalachian Coal Operators' Association, in this proceeding I am testifying on behalf of the Harlan County Coal Operators' Association, because privately owned cars are not used in the distribution of the Hazard Coal Operators' Exchange or in the Southern Appalachian district. My duties include among many other things the matter of coal car supply, which has required constant attention and study in the past four and a half years, and during that time in the Harlan field
3053 there has been an adequate supply of coal cars at mines using unassigned cars from January 1, 1921, to April, 1922, a period of 16 months only. The weekly reports of the car service division of the American Railway Association, the official monthly reports of the Louisville & Nashville Railroad Company (1905) covering coal car distribution, and the weekly reports of the United States Geological Survey considered together demonstrate that the commercial mines using unassigned system cars in the Harlan field have been among the greatest, if not the greatest, sufferers from the coal car shortage and (or) the transportation shortage of any other district in this country. The Harlan district embraces all the mines in Harlan County. It is served by the branch of the Louisville & Nashville Railroad known as the Kentucky & Virginia Railroad, extending from Acosta to Benham, with numerous branch lines. The distance from Acosta to Benham is about 61 miles. The Harlan County line begins about Teges, which is some

distance from Acosta, and figures I have given relate largely to the Harlan district. In the reports of the Louisville & Nashville Railroad covering coal car supply the Cumberland Valley division as a whole is used, and that division includes a great many other mines than those in Harlan County, Ky. There are in Harlan County about 73 coal mines, of which 62 are now in operation, the balance being shut down. The mines of the United States Coal & Coke Company, using privately owned assigned cars exclusively, (1906) are located at Lynch, Ky., the extreme end of the line, and require the maximum transportation service in Harlan County. The assigned privately owned car mine of the Wisconsin Steel Company is only two or three miles away from Lynch. Therefore that mine also
3054 requires almost the maximum service in the Harlan field.

Our study of this situation has led us to the conclusion that the failure of the Louisville & Nashville to furnish adequate transportation may be summarized as follows: First, the development of the coal mines in the Harlan field has been greatly in excess of the ability or capacity of the Louisville & Nashville to handle the output of the mines. Last year the production of the coal mines in Harlan County was, according to the reports of the chief mine inspector of the State of Kentucky, 6,268,152 tons, of which the United States Coal & Coke Company shipped 1,217,323 tons; Melcroft Coal Company, 238,467 tons; Fordson Coal Company, 427,385 tons; Wisconsin Steel Company No. 1, 547,353 tons, making a total of 2,430,528 tons shipped by mines now using privately owned cars out of a total of 6,268,152 tons, or about 40 per cent. Some of the development of coal mines in the Harlan district occurred before the Federal control of the carriers, but the larger part was during Federal control (1907). Second, the limited capacity of the Louisville & Nashville to handle the traffic, which is conservatively estimated at only an average of 900 cars of coal daily, in addition to other freight of the entire Cumberland Valley division. Third, the operation of such a large number of privately owned assigned cars over a single-track line for six of the largest mines in the Harlan district, whose rated capacity is about 25 per cent of all the mines in the Harlan district. The total number of such privately owned assigned cars in the service, according to the testimony, is, by the United
States Coal & Coke Company, 2,250; Melcroft Coal Company,
3055 650; Wisconsin Steel Company, 499; Fordson Coal Company, 800, a total of 4,199 privately owned cars, which is one-seventh or about 14 per cent of the 30,000 privately owned cars in the entire country. The Fordson Coal Company had in this service 1,004 cars which has now been reduced to 800. Fourth, the frequent and prolonged periods of transportation shortage on the Louisville & Nashville and connecting lines, resulting in a very unequal distribution of the available coal cars in the possession of the Louisville & Nashville among competing mines on different divisions of the railroad using unassigned system cars. (1908) I consider the capacity of 900 cars per day of coal on the Cumberland Valley

division of the Louisville & Nashville, to which I referred, a very fair statement. Several years ago a statement was made by the management of the Louisville & Nashville to me that the capacity was around 750 cars per day. I have made due allowance for the improvements which have been made and regard 900 cars per day on the average for an entire month as a fair statement of their ability or capacity to handle coal on that division. As a matter of fact, on the Cumberland Valley division, the largest number of cars handled in any one month was during May, 1922, and they amounted to 21,654 cars. That was for 31 days and is an average of 700 cars per day for the month. In May, 1922, the conditions were ideal, so far as the expeditious handling of coal from mines on the L. & N. Railroad were concerned. The strike of the bituminous coal miners in the central competitive territory was then in progress. The railroads north of the river did everything they could to
3056 expedite the movement of coal, furnished the empties, saw that no congestion occurred at Cincinnati and Louisville, through which most of this coal moved. (1909) Every preference was given coal on the Louisville & Nashville during that month and I believe that the amount of coal they handled during that month, of an average of 700 cars a day, at that time represented practically all they could handle in addition to other traffic.

By Mr. NORTHCUTT:

The car supply that month was 80 per cent, based on the mine ratings, not including the coal car supply at mines using assigned cars. If they were used, of course, that would make the percentage furnished of cars ordered slightly greater. That is for the Cumberland Valley division. I have used the revised mine rating effective March 1, 1923, because of some criticism or some suggestion that prior to that time the ratings of the mines may have been in excess of the actual ability of the mines to produce coal. On March 1, the mine ratings of the Louisville & Nashville (1910) were revised.

By Director BARTEL:

I think that the amendments that have been made since March 1 which are not, as I recall it, very material, would give us to-day fair and reasonable ratings for the mines. I wouldn't say that our ratings on March 1 were grossly inflated. I will say this: That our car supply has been so extremely short at mines depending upon unassigned cars that the ratings in effect prior to March 1 were based upon what they had reason to expect in the way of a car supply, that is, a day and a half, two days, or at the outside three days per week. I don't believe that these ratings in effect prior to
3057 March 1 reflect the actual ability of the mines to produce the number of cars for rating called for, that is, consecutive days in the week, but it did cover what they actually loaded on the days in which they were furnished cars. The mines demonstrated that they could do that, because their ratings continued practically unchanged and the mine ratings from month to month were based upon

the ability of the mines to produce the coal. (1911) I assume that term working time of a nonunion mine is in some instances a misnomer, although my information is that on days of idleness, when there are no cars available for loading, the miners will go into the mine and under-cut and do various things, preparing to make a good run when they do get cars. That is what brings the rating up, where they are working intermittently.

By Mr. LIVERIGHT:

That applies only in these districts. I understand in the districts where there are agreements with the United Mine Workers the miners do not go into the mines unless there are cars available. Using the revised mine ratings effective March 1, 1923, we have private-car mines, 7,290 cars; mines in Harlan County using unassigned system cars, 21,730. The balance of the Cumberland Valley division, 13,534, making a total of 42,527 cars in a month. (1912) The mine ratings are changed on the 10th of every month. This is based on what the mines are entitled to order from the first to the 10th and from the 10th to the end of the month, provided the orders were less than the rated capacity, in which case the orders are used. This reflects the mine ratings however. In
that case, the private-car mines had 17 per cent of available
3058 transportation facilities other than cars; the commercial mines
in Harlan County, 51 per cent; the balance on the C. V.,
32 per cent. Based on that, using 700 cars a day would entitle the private-car mines to 119 cars a day, the Harlan County commercial mines, 357 cars; and the balance of the Cumberland Valley division 224 cars a day. Under our present mine ratings I think without a doubt if cars were furnished six days a week we could load up to those ratings. Based on a maximum capacity of 900 cars per day, which as I have stated has not been available for 30 consecutive days, it would give the private car mines 153
cars, the Harlan County mines 459 cars, and the balance on
3059 the C. V. division 288 cars a day. (1913) The present
ratings of the mines using privately owned cars are as follows: The United States Coal & Coke Company, 120 cars; Wisconsin Steel Company, 55 cars; the Fordson Coal Company, 62 cars; Melcroft Coal Company, 25 cars, making a total of 262 cars per day whereas under the distributive share of the facilities of the carrier other than cars, the private-car mines would only be entitled to 119 cars a day.

"Q. [By Mr. Liveright] * * * Is it your contention, say, that by reason of these private-car mines having a greater rating than the commercial mines, that they are utilizing a greater percentage of the carriers facilities than they are properly entitled to?

"A. Absolutely."

By Mr. LIVERIGHT:

There are "other public utilities, contracting coal mines in the Harlan County district, other subsidiary companies, which operate

on unassigned system cars and in addition to public utilities there are industrial plants likewise securing coal from mines operated by their subsidiary." There are seven of these mines which will be detailed later by another witness, the combined rating of which is 132 cars a day. If those mines having a rating of 132 cars per day elected to provide themselves with private cars, and they could operate them just as efficiently as others which use private cars (1914), because they ship from the same points practically to one point of destination, we would have a total of 394 cars per day, and the proportion of the available transportation of all the Harlan County mines, based on 700 cars per day, is 476 cars. Therefore, we would have the private coal-car mines demanding 394 out of 473 cars, leaving 82 cars per day for distribution among the 3060 other 60 mines. That is the most forceful illustration I can make of what the situation is down there in that district. I desire to file as an exhibit a resolution adopted by the Harlan County Coal Operators' Association, with exhibits, which resolution was filed with the director of the division of public service, and with the Interstate Commerce Commision, as showing the position of the Harlan County Coal Operators' Association in the matter of assigned cars.

The statement referred to was received in evidence as Exhibit No. R–41.

(1915) Briefly, the position of the Harlan County Coal Operators' Association is one of protest against any form of unjust discrimination in the matter of service, no matter how accomplished; whether by the construction at coal mines of bins for the purpose of securing a rating on those bins, and therefore securing an advantage over other mines, or by the expenditure of large sums of money for privately-owned cars by a few large operators of coal mines, admittedly for the purpose of securing an adequate supply of coal cars at their mines, and a regular tonnage of suitable coal from their own mines, and we will undertake to show that this has been the result, regardless of the transportation shortage, and the supply of unassigned system cars at commercial mines. Our operators believe it is the duty of the Louisville & Nashville and the other carriers parties to joint through rates on which our coal is handled to provide all of the necessary facilities, which, of course, includes coal cars, to properly function as common carriers, and that it is not the duty of the shipper to furnish cars in order to secure transportation. I file as Exhibit No. R–42 an extract from a report of the American Railway Association conference committee, which has already been read into the record itself, but on this 3061 has been shown that the signers of the report include Mr. G. E. Evans, (1916) vice president of operation, Mr. A. R. Smith, vice president of traffic, and W. A. Northcutt, general solicitor of the Louisville & Nashville.

The document referred to was received in evidence as Exhibit No. R–42.

I desire to file as Exhibit R–43 a statement compiled from the official records of the Louisville & Nashville, showing the coal car supply at mines in Harlan County, Kentucky, using assigned coal cars of private ownership, compared with the coal car supply at mines which are furnished unassigned railroad system coal cars during the months of March to September, inclusive, 1923.

The document referred to was received in evidence as Exhibit No. R–43.

This exhibit begins on March 1st, the day on which the revised ratings of the mines took effect. (1917) The subsequent months also are based on the current monthly ratings of the mines. It is customary to use in the distribution of cars the mine ratings provided the orders for cars are not less than the ratings, in which case the orders for the cars are used for the purpose of distributing the cars and arriving at the percentage furnished of cars ordered.

By Director BARTEL:

When the order is less than the rating then the order is used. First, we show under the month of March that there are six mines using assigned private coal cars, which are designated on this exhibit. The daily mine ratings in cars of these six mines—what they are entitled to order—is shown. What they are entitled to order is based on the mine rating from the first of the month to
3062 the tenth, and the ratings are revised from the tenth of the month to the end of the month. That is the reason why we show that column entitled "to order." They are not entitled to order in excess of their rating fixed by the Louisville & Nashville mine rating commission. Then is shown the number of cars ordered, then the number of cars supplied, then the percentage furnished of cars ordered. (1918) It will be seen, for instance, in connection with the Melcroft Coal Company at Coxton, they were entitled to order 329.4 at the Coxton mine. They ordered 407. They were supplied with 355. Therefore, you divide the number they are entitled to order into what was supplied and you get 110 per cent for that month. The other mine of the Melcroft Coal Company shows 108 per cent furnished of the cars entitled to be ordered. The six mines having assigned private cars were furnished 85.09 per cent of the total, while the unassigned system car mines were furnished with only 27 per cent. In April the privately owned car distribution was 94 per cent and the unassigned system cars 36.3 per cent. In May the privately owned cars, assigned mines, was 90.4 per cent, the unassigned system mines 44 per cent. Improvements occurred in July when the privately owned cars are shown to have 100.41 per cent which ought to be cut down to what they ordered, and the unassigned shows 93.63. But in September it went behind again, when the privately owned got 97 per cent and the unassigned system cars 66 per cent. During the month of October, the present month, I am quite sure that the supply of cars (1919) has been adequate,

because there is no market for the coal and the orders have decreased to a very great extent.

"Q. [By Director BARTEL.] Now, if that is so, Mr. Boyd, why does the Geological Survey report that for Harlan County for the week ended October 26 there was only 20.2 per cent, due to railroad disabilities, transportation disabilities, and for the week of October 16th——

3063 "A. (Interposing.) I can't explain figures of that kind, Mr. Examiner. I don't know why it should be so. Those figures are really based on the figures of car distribution furnished by the railroad, very largely.

"Q. This is the time lost due to these different disabilities. What I am referring to is the per cent lost on account of transportation disability. My understanding is that this information is furnished to the Geological Survey by the coal operators themselves?

"A. Furnished by the secretary in Harlan County, I think.

"Q. I understand that, and I was wondering how you reconcile your present statement with this.

"A. I won't attempt to reconcile it unless I know the source from which he obtained his figures. I would be very glad for this record to have that explained. You don't question the no market condition?

"Q. The no market shows 30 per cent for the week ended October 26 and 40.2 per cent for the week ended October 13th? (1920)

"A. I will be very glad to furnish the commission with an explanation of that, if it is desired.

"Q. I would like to have it for my own information, not so much for this particular case, but for my own information."

This recapitulation of Exhibit R–43 shows the operation of the six mines using privately owned cars for the seven months shown thereon. During the month of March, with a percentage of the rated capacity of all mines in Harlan County of only 24.7, these privately owned car mines received a percentage of 50.7 of all cars placed.

"Q. [By Director BARTEL.] Did I understand you to say a moment ago that your present car supply was adequate?

"A. During the month of October, so far as I have seen
3064 the figures—I have seen all of the first week and the second week and one in the third week, and that is as far as I have seen.

"Q. I have the figures before me for the week ending October 13th, showing the L. & N. percentage of distribution to be 79 per cent. * * * (1921)

"A. If that is the case, Mr. Examiner, I don't know it.

"Q. Seventy-nine per cent.

"A. That in itself may explain the disability you referred to as the United States Geological Survey report. However, I can ask some of our operators here whether there has been a shortage during the week of October 13th at their mines.

"Mr. MARLAND. I understand so from some of the operators. I understand there were two or three days when there was a little car shortage.

"Mr. HAMMOND. We lost two or three days for that reason.

"Q. [By Director BARTEL.] This is October 15th, which would be within the first 15 days, and it shows a percentage of distribution of 79 per cent?

"A. For the whole system?

"Q. Yes.

"A. I expect I can explain that. The shortage may have been in the Harlan division or the Knoxville division—other than the Cumberland Valley division. I can't say as to that."

I desire to file as Exhibit R–44 a statement (1922) compiled from the official printed monthly reports of the Louisville & Nashville showing the coal car supply at all mines on the Louisville & Nashville and the short line connections which are furnished unassigned system coal cars, and a comparison of the supply at mines on the Cumberland Valley division, on which the Harlan district mines are located, and the comparison with the entire system, April 1,

3065 1922, to September 30, 1923. These short lines I refer to, such as the Cumberland and the Manchester, and the Interstate Railroad, are dependent connections of the Louisville & Nashville. They secure the entire car supply from the Louisville & Nashville. That exhibit, of course, shows a discrepancy during those months in the car supply on the Cumberland Valley with that of the entire system.

The document referred to was received in evidence as Exhibit No. R–44.

I desire to file as Exhibit R–45 a statement which brings down the distribution of coal cars among the mines of the various divisions of the Louisville & Nashville from April 1, 1922, to August 31, 1923. It will be (1923) seen at the bottom of the page that the balance to date shows that the Cumberland Valley division, on which the mines in Harlan County are located, are short of their distributive share of available cars for distribution among commercial mines 24,603 cars, while Alabama has over 25,940 cars; the Henderson division 8,381, the St. Louis division 3,480, and the Owensboro & Nashville 3,343.7 cars. This cumulative shortage on the Cumberland Valley division has been almost constant since April 1, 1922. Of course, a great deal of the unequal distribution occurred during the strike, but our point is that if the Louisville & Nashville had transportation available they should have utilized that transportation in the movement of these cars from the districts which have received these cars in excess of their distributive share and to the district in which our mines are located. Practically all of our mines in the Cumberland Valley are non-union mines. There are a few that have worked under what is known as the Knoxville agreement. Practically all of

the mines were operating during the coal strike of 1922. There
3066 were a few exceptions. (1924) As to the greater number of cars ordered during the period of the coal strike than ordered at the termination of the strike, I expect that was caused by the operation during the strike of the mines on a very much better car supply than it had before. I expect the coal supply influenced the number of cars ordered. In other words, based on continuous operation of six days a week, their ability per day to produce coal is less than if operated intermittently. I show a percentage of distribution of about 67 in June, 1922, on my Exhibit 44 and in January, 1923, 23.6 per cent. (1925)

"Q. [By Director Bartel.] That is what I am getting at. How could the mines, if they were operating full time during June of 1922 and their mine ratings were 30,991, how could they jump up to 50,258 in two months?

"A. The short running time is the only way I can explain it.

"Q. In other words, it is the inflation?

"A. Oh, I admitted inflation to a certain extent. It is not inflation based on what they could actually produce working one and one-half, two, or three days a week.

"Q. No; but they couldn't anywhere near produce that amount of coal working six days a week?

"A. I don't think they could."

As to whether it would be proper for the commission or anybody else to order the Louisville & Nashville to make up a shortage based on any such figure, the same thing was true of every district of the Louisville & Nashville. (1926) This exhibit does not tell all the story by any means. The Louisville & Nashville in the Birmingham district used Rodger's ballast cars or some other cars, which are not copied in the reports of cars ordered or furnished, or in the
3067 distributive share. These cars are usually used by furnaces from the mines to the furnaces and do not appear on this exhibit. As to the number of cars ordered in January, 1923, these orders (1927) do not include the privately owned cars. They are unassigned cars. I understand they include all the cars ordered by the unassigned mines and they are shown in the official reports of the Louisville & Nashville. I don't think any of these mines were closed at that time. As to the dropping of the orders in March to 35,236.7, or about 33 per cent, that might have been partly due to orders being placed. I can't say as to that. The mine rating governs unless the orders are less, in which case the orders govern. I think the number of cars ordered for March properly reflects a reduction in the mine ratings made upon the L. & N. on that date. I think that is about what it was.

The document referred to was received in evidence as Exhibit R–45.

(1928) I desire to file as Exhibit R–46 a statement showing shipments of coal from the mines of the Harlan Cooperative Coal Com-

pany, Evarts, Kentucky, to the By-Products Coke Corporation, South Chicago, Illinois. There was a total of 30 cars shipped by that mine to other destinations, but these cars are those shipped to this particular concern in L. & N. cars. With respect to comparing the movement of private cars with that of system cars, the very fact that system cars are permitted under car service rules to be loaded by non-owning lines in the direction of home, and that they are frequently misused and kept away from the line owning the cars, while under the rules governing the movement of privately owned cars, those cars can not be used except in the service of the owner, indicates that the privately owned cars would certainly make better movement so far as the empty return movement is concerned. In order that something like an exact idea can be gotten by the
3068 commission, we desire to file this Exhibit 46 and to ask that on these same days indicated there, March 5, 8, 12, 15, 22, 26, and 28, the same number of privately owned cars from the mines of the United States Coal & Coke Company, Wisconsin Steel Company, and the Melcroft Coal Company, whose product is shipped to Chicago, or in that vicinity, be furnished by the Louisville & Nashville, (1929) and that the Louisville & Nashville furnish the commission with the return of those cars as shown on Exhibit R–46 to their railroad and the movement and return of these privately owned cars to their railroad.

[(1942) Upon objection of Mr. Northcutt for the Louisville & Nashville, Director Bartel ruled that the information requested would not be required.]

By Director BARTEL (1943):

With respect to questions asked in connection with my Exhibit R–44 as to the number of cars ordered during the month of June, my recollection was very hazy about the situation in the Harlan district at that time. I can not tell about all the mines on the Cumberland Valley, because I have not that data; but I have the data so far as the Harlan field is concerned, and the number of cars ordered by mines in Harlan County during the months preceding June—undoubtedly the car distribution report which I have before me, during April, shows that there were nine mines, with a daily rating of 94 cars, shut down entirely during the entime month. That was undoubtedly a strike. There were also 14 mines, some of them quite large, whose orders for cars were very small. For instance, the White Star Company (1944), with an aggregate rating during the month of 875 cars, only ordered
15.4. That mine was also shut down on account of the
3069 strike and a large number of other mines in there. In May the situation improved down there, and the orders for cars increased because some of the mines went back to work either on part time or full time. In June more of them went to work, and from then on the productive ability of the mines increased, as shown by these car-distribution reports. As to whether it has increased as

much as shown by these reports, I can not say, because I have just got these figures to go by; but that explains the increase from April to June. The strike was on in April at a large number of these mines in Harlan County and I recollect now that it was also true of other mines on the Cumberland Valley division of the L. & N. I have admitted that the ratings established in March by the Louisville & Nashville approximated the productive capacity of the mines. (1945) None of these mines lessened their output during the period from July, 1922, to March, 1923, but some of them increased it. I desire to file as Exhibit R–47 a statement showing that during the month of March, 1923, the coal mines in the Harlan district on the Cumberland Valley division of the L. & N. using assigned private coal cars handled a larger number of cars of coal than their distributive share of the maximum capacity of the Cumberland Valley division of 900 cars daily, or 27,900 cars per month, which estimated capacity is not less than the actual, as 21,654 cars of coal is the largest number of cars ever handled in any one month, and this was handled during May, 1922. This shows that the distributive share of the assigned private car mines, (1946) based upon the mine ratings or the orders if less was 17.14 per cent or 4,782 cars, whereas during that month they actually handled 5,873.2 cars, or 1,091 cars more than their distributive share. The aggregate
3070 mine capacity of the mines of the Cumberland Valley division is 42,526.7 cars during the month, in this statement. That is approximately the daily capacity but not altogether because there were some orders less than the mine ratings. This would mean an aggregate mine rating of over 1,000 cars per day. (1947) The L. & N. could not at any time furnish the mine on the Cumberland Valley division with 100 per cent and be able to move the traffic. A great many mines on the Cumberland Valley division of the L. & N. screen their coal, and while they order these cars, it requires more cars per day than the number of loaded cars that are shipped out, because of part loads left over at the end of a day's run. That is absolutely necessary because they can not fill out a full car at the end of a day's run and what is left in the car is retained and counted as a car furnished the following day.

By Mr. BROWDER:

A great many of the commercial mines do that.

By Mr. BAKER (1948):

That screening is necessary for the purpose of furnishing the size coal desired, particularly for domestic consumption, and egg size coal, and prepared sizes of various kinds. It is very largely for domestic purposes but still for other purposes as well.

By Director BARTEL:

I am sorry I have not exact data upon which I could base conclusive testimony with respect to a shortage of locomotives. Numerous times we have been informed, rather unofficially, that

there was a shortage of motive power. It is not the custom of the railroad to advise their coal operators who file their orders for coal cars the reason why they are not furnished with cars, but occasionally we inquire of the railroads, and the railroads without hesitation will give us the information. Of
3071 course, we know that there was a great shortage of power right after the strike of the railroad shopmen, and the situation was brought about and continued so for many months (1949) after the strike was supposed to have been settled, because the motive power was in pretty bad shape on the L. & N. Railroad, as well as other railroads. I can not testify to the exact dates that cars were not placed because of transportation shortage, nor can I testify as to the exact dates of inability to handle system coal cars by reason of insufficient tracks or by congestions. I know that congestions have existed from time to time. But the L. & N. Railroad have advised us that they have restricted the movement of privately owned cars when the facilities of the carriers, other than cars, were lacking. I can only state so far as my Exhibit No. 43 is concerned that if you will observe that exhibit for the months of March to September, inclusive, you will find that in every month some one of these four users of private coal cars has had 100 per cent or better of a coal car supply, except the one exception of the month of August, in which the United States Coal & Coke Company has 99.84 per cent; so therefore the holding back of these privately owned cars so far as these seven months are concerned does not seem to have materialized. (1950) On my Exhibit 47 I show the number of unassigned cars ordered during the month of March to be 35,236.7. That is not the aggregate rating of all the mines on the Cumberland Valley division. It is the aggregate rating or order if less than the aggregate rating. The aggregate rating may be slightly in excess of that, but it is not a material thing, I am sure. I think all the mines were attempting to run during this month of March. You will notice from another exhibit there that the coal car supply was very low. I don't recall that any mines were shut down. However, I am not certain as to that because I have not the complete Cumberland Valley division orders here.

3072 (1951) The 21,542.1 cars shown as ordered in March on Exhibit 43 are for Harlan County only. The other is the entire Cumberland Valley division. It is true that the aggregate mine ratings on the Cumberland Valley division may be in excess of the 35,236.7 figure by reason of the fact that some mines do not order their rated capacity or that some mines may have been closed down during that month. (1952) Assuming there are 26 working days in that month the aggregate order per day would be 1,355.2 cars, which is over 400 cars in excess of what I said the L. & N. could handle; but deduct from that about 18 per cent for the partly loaded cars. In addition to those we also have our assigned private car mines on that division. According to the figures here the rating

there is 7,290 cars. As to whether that would bring the rating practically 50 per cent in excess of the ability of the L. & N. to handle it on that division, there is no question about the overdevelopment of the mines compared with the ability of the railroad to handle coal. The L. & N. people themselves will admit that. I have heard Mr. Mapother say it. I do not suppose Mr. Northcutt will say anything else. (1953) In view of those facts the L. & N. ought to give the mines on that division the distributive share of all cars. Of course, the known, definite figure of the capacity can not be determined. It can only be approximated. That would be the natural way to get at that, to say that there would be so many cars that the L. & N. can handle each day and those only; and then apportion that number among all the applicants for the cars. That is, assuming that the L. & N. has on that division each day 900 cars, which is the maximum that they can handle, making allowance for the part loads, which would be probably 18 to 20 per cent higher than that. I mean they could place the cars, but there would be that many left over at the mines, and the amount for transporta-
3073 tion would be 900 cars a day. (1954) I would say about 1,100 would be a reasonable figure. If 1,100 cars met the requirements, of course, I would not complain; but if it resulted in a fewer number of cars being placed at the mines of our operators than their distributive share of the available transportation, then we would object. (1955) If 1,100 cars were all the L. & N. Railroad could furnish on that division and adequately handle, and these cars were given the division and each mine got its pror rata share of those 1,100 cars, that is all we could expect under the circumstances.

By Mr. NORTHCUTT:

As to whether I know that on last Monday the L. & N. placed at the commercial mines on that division 991 cars, in addition to taking care of the private car operations, my answer is, "No; I don't know that." I have not seen the reports. I have the report only for this morning, I think. It was last Tuesday they showed 100 per cent car supply, but while (1956) you did that, the orders for cars are much less than heretofore, much less than the rated capacity of the mines.

By Director BARTEL:

When the demand for coal is very light, as at present, the orders are very much less than they are where there is a great demand for coal. I think that generally orders go down when you have a good car supply, unless there are strike conditions in some sections of the country, or something of that kind; but normally, if the car supply is adequate all over the country, of course, the orders go down. There is no coal problem, if you eliminate the question of transportation. The coal problem is altogether based upon the lack of transportation. (1957)

By Mr. NORTHCUTT:

The question is, what is the average going to be for the month;
900 is the average, not the maximum for one day. There is a great difference in there. In the petition of the Illinois
3074 Steel Company or the United States Coal & Coke Company, on page 18, reference is made to complaints concerning inadequate facilities filed with the Interstate Commerce Commission. I presume that reference is made to a petition filed by the Coal Operators' Association, which I represent, several years ago. It is stated in the petition that the situation was corrected by the L. & N. Railroad and the petition was withdrawn. That is absolutely incorrect. (1959) That was withdrawn after a conference with the L. & N. people, not because the situation had been corrected, because it had not, but because the car supply became adequate, and I think I have already testified that the car supply was reasonably satisfactory for a period of some 16 months.

3075 Cross-examination (1960) by Mr. NORTHCUTT:

I stated that the Harlan field suffered more from insufficient transportation than any other coal field in the country. As to whether the car supply in the Harlan field for the commercial mines was the same or approximately the same as the car supply in the Hazard field "just across the mountains," I would hardly call it just across the mountains. There is some difference in there, and the car supply some months was worse in the Harlan field and some months it was worse in the Hazard field. (1961) Harlan and Hazard were relatively pretty evenly supplied with cars, but neither one of them anything like the extent of the cars placed in the Alabama mines. As to whether the cars available in that section of eastern and southeastern Kentucky were distributed to the Hazard and to the Harlan field on as near an equality as was practicable and on substantially an equality, I think that exhibit of mine shows that they were; that is, Harlan and Hazard combined; their distributive share of the system. As to whether there was additional suffering in Harlan as compared with Hazard as a result of certain coal operations in the Harlan district supplied with private cars, that is a question of cause and effect. Equalizing the supply between the Harlan and Hazard was of course affected by the cars furnished the private car mines. (1926) I do not mean by that that the cars furnished the private car mines are charged against the Harlan district in the system distribution, but they are charged against the transportation ability of the Harlan field to move coal. That is reflected in the smaller car supply of the commercial mines. On the average I don't think the commercial mines in the Harlan
3076 district received any smaller car supply than the mines in the Hazard district.

By Director BARTEL:

Eastern Kentucky in my exhibit includes Hazard and McRoberts district.

By Mr. NORTHCUTT:

That is my Exhibit No. 45. (1963) I spoke of the Lynch mine as being at the end of the Kentucky & Virginia or Poor Fork branch of that division and as requiring the maximum of transportation service. The distance from Lynch is somewhat greater than the distance from mines at the end of the Clover Fork branch. In connection with maximum service I had in mind the distance that coal is hauled. I stated that several years ago, in a conference I had with certain officials of the L. & N. Railroad, it was stated that the capacity for handling from the Cumberland Valley division at that time was 750 cars. Mr. George Evans, vice president of the L. & N. Railroad, is the authority. I start out with that 750 several years ago. (1964) The 150 added is not my figure. That is a figure that we were told, while the improvements were contemplated and in progress, would be the capacity when completed. I think that was a little later than 1920. I am not sure as to that. It was in a conference, one of those periodical conferences, we had with the L. & N. management with respect to insufficient transportation and what could be done to relieve our situation. I said that in May, 1922, they handled a total of 21,654 cars. That represented average loading by the coal mines of something over 700. The
3077 coal mines do not load 30 days in the month, but the capacity is based on 7 days' operation, of course. (1965) They do not load 7 days. A fair average of the time mines work is 25 days a month, when they have cars; 21,654 would represent an average loading by the coal mines of something in excess of 800 cars a day. During that month all the mines in that field did not have all the cars they could load, the car supply to commercial mines being 80 per cent.

Q. (By Mr. GUTHEIM.) Is that satisfactory?

A. Well, an average in times of great demand—and if 80 per cent were the figure generally—furnished coal mines all over the country, I think we would be reasonably satisfied in periods of demand, if that was what everybody got.

By Mr. NORTHCUTT:

(1966) I took some figures for the month of March, 1923, and used 7,290 cars as the rating of the private car mines and 21,703 cars as the rating of the commercial mines in Harlan County, and gave the balance for the Cumberland Valley division as 13,534. Those were revised mine ratings. I figured out from those that the private car owners were 17 per cent of the division ratings, the Harlan County commercial mines 51 per cent, and the balance of the division 32 per cent. I have included all the mines which the L. & N. Railroad in its printed monthly reports include in the Cumberland Valley division. Those reports show the mines on the Interstate Railroad and the mines on the Middlesboro Railroad as joint

with the Southern Railway. (1967) However, I think the ratings shown for the joint mines are prorated between the two roads. That is my recollection of it.

3078 By Mr. NORTHCUTT:

Joint mines are indicated on the printed monthly reports of the L. & N. With reference to the bottom of the page, it says: "Denotes mines served by Louisville & Nashville-Southern Railways." The report does not indicate whether that is a daily capacity of the mines for both roads or what is used by one road. I am not fully advised as to the status of the furnishing of cars to joint mines. That may have been the rating there, and they may not use that rating there in distributing to joint mines. I am not certain as to that. (1968) I have included those joint mines just as they are shown in the printed monthly reports, as the mine rating. This report shows the daily loading capacity of mines in tons, Interstate Railroad, served by L. & N.-Southern-Interstate and Norfolk & Western Railways, 15,605 tons daily loading. That is something over 300 cars. As to whether those joint mines ship practically their entire output of coal to southern points and do not make any demands upon the L. & N. Railroad Company, I do not know that. (1869) I know the mines on the Interstate Railroad ship coal north. The amount varies, but there used to be a pretty good movement there to Indianapolis of gas coal and to other points. I am quite sure that there is quite a movement. There was a large movement during the strike in the bituminous coal fields. I do not know anything particularly about that movement since the strike during the present year. I know the operators and owners jealously watch their rate adjustment. If they were not interested in the territory I do not understand their concern. As to whether the other commercial operations are shipping two-thirds as much coal as the commercial operations in Harlan,

3079 they may not be shipping. This calculation was made for the purpose of determining (1970) what would be a proper distributive share of the available transportation on the L. & N. Those people are certainly entitled to their distributive share, and the rates are in, and the coal can be moved, and I think that should be taken into consideration. As to whether if those fellows over there in Virginia do not use what they might be entitled to we would object to the L. & N. giving it to the Harlan County mines and also to these private car operators (1971), we would not if it is distributed evenly and they do not want the transportation. If we do not need the transportation, we do not object to other people having it. It is when we need it that interests us. As to the Harlan County mines, we want 100 per cent of what we order. The control of what we order is in our hands, and we are entitled to that. Sometimes we need 100 per cent of our rating 6 days in the week. In seasons of demand we do. Sometimes we do not need it. (1972) If we do not need it, we do not have to order it. The showing in my Exhibit R-41, page

5, of commercial mines in the Harlan district in February rated with 1,250 cars a day, and in March 775 cars a day was a part of that deflation, a part of the change in the mine ratings. That was not the result of an agreement between the coal operators and the railway company. They had a meeting, and the L. & N. announced what they were going to do, and that was all there was to it. However, in connection with that exhibit, the industrial mines were also reduced from 393 cars a day in February to 279 cars. (1973)

By Mr. BROWDER:

3080 There are slight variations in the total number of privately owned cars supplied for March, April, May, and July [in Exhibit R–41, page 6] as compared with the figures shown on my Exhibit No. 43. My Exhibit No. 43 was compiled from official reports of the L. & N. Railroad shortly after the close of the month, and perhaps the figures which Mr. Clayton gives in the resolution adopted by the association were the figures corrected. There are not very great differences in the number, except in connection with July. Mr. Clayton shows 6,118 cars furnished the private mines, while I show 5,725.

By Mr. NORTHCUTT:

The recapitulation is part of Exhibit 43. (1973½) The column headed "Number of cars furnished" these commercial mines is the total number of cars furnished the commercial mines, and the next column is the per cent of the orders for cars. In other words, they got 27.3 per cent of the orders during the month of March. The 74.3 per cent following that is the distribution based upon mine ratings and orders of all cars on the division.

By Mr. GUTHEIM:

I do not mean necessarily using the privately owned cars at the commercial mines. I do not mean that at all.

By Mr. NORTHCUTT:

If you take the total number of cars, commercial and private, in that district and prorate that number—not the cars but just the figures—over all, the percentage would have been 74.3, and the number of cars 9,091 instead of 5,876.

By Director BARTEL:

As to whether the L. & N. could handle them on that division, they did handle them. It is just the distributive share of all
3081 the cars that were up there, assuming that if they had not placed these privately owned cars up there they would have had motive power and other facilities to have moved more system cars up there, and this would have been the distributive share. (1975) 74.3, I think, would have been the distributive share of the private car mines, as well as the commercial mines. It is everybody's pro rata share based on ratings and orders, if less. I have the num-

ber of cars placed at the six mines as 6,203 for March; the number of cars furnished commercial mines, 5,876.

By Mr. NORTHCUTT:

All of the mines in the Harlan County, the commercial mines, were entitled, based upon ratings and orders, to 74.3 per cent of available cars, assuming that there were no private cars up there, and that would give 9,091 cars. Their ratings and orders entitle them to that much, whereas private car mines were entitled, under their ratings, to 25.7 per cent. (1976) In other words, these 9,091 cars are what the commercial mines would have gotten based upon the distributive share of all the cars in the field.

By Director BARTEL:

The private car mines would get their distributive share, because their distributive share was less than the commercial mines. It will be observed in the first column of the exhibit that the percentage of the privately-owned car mines' rating of the rated capacity of all mines in Harlan County was 24.7 per cent. I aggregated their ratings and took that percentage of the total amount of cars on line. This exhibit prorates all the cars and distributes them according to the mine ratings, except that I did not put the other percentage
3082 out there. The first column is the percentage of the rated capacity of all mines. The distribution column is on this other side. Under commercial mines it gives 74.3 per cent. The percentage of the available equipment (1977) of the mines now using privately owned cars is the difference between 74.3 and 100.

By Mr. NORTHCUTT:

As to whether, assuming that these private cars had not been private cars but had been system cars and had been rolling south through Louisville and Cincinnati, I would have rolled all of them to the Harland field or would have hauled some to the Hazard district, I would, if I were distributing cars, make an equal distribution between divisions, based on mine ratings, and orders if less.

Q. (By Mr. NORTHCUTT.) So that if these private cars had been system cars, then it does not mean at all that the Harlan district would have had a 74.3 per cent car supply if Hazard and western Kentucky had received their distributive share of those private cars converted into system cars?

A. Yes; I think that is right, keeping in mind that the Cumberland Valley division is limited in its capacity, and that cars were not placed there because the railroad did not have the ability to move them there.

Q. When was that a fact?

A. I think it has always been a fact. (1978)

By Mr. NORTHCUTT:

With respect to certain rules which I put in when I testified in this case, my testimony was very clearly to the point that those rules were simply prepared to find how far the owner of private cars was

willing to go in the matter of accepting his distributive share of available transportation. (1979) Those rules were prepared primarily because there had been in the record considerable con-
3083 fusion as to how a privately owned mine could be restricted to its distributive share of available transportation, and conditions other than the mere matter of furnishing cars. That was the reason I put it in. I gave it to Mr. Liveright first to use it, and Mr. Aitchison wanted to know who prepared it, and I went on the stand and told him who prepared it and the conditions under which it was prepared. The record speaks for itself there. I had not any idea that it was to be a conclusion, and I say right now that in my opinion the only way these privately owned car mines can be restricted to their distributive share is in the manner in which the commission have already decided. It is all right to talk about shortage of locomotives and shortage of tracks and shortage of terminals and congestion at terminals, but nobody on earth can determine that thing, even the railroads themselves, when it is controlling. (1980)

By Director BARTEL:

I think what the commission has done is far preferable to those rules. I do not want the commission to put them in. (1981)

Q. (By Mr. NORTHCUTT.) Let me ask you this, then, Mr. Boyd, without asking you to concede that it is a fact: Let us assume that the L. & N. Railroad Company has sufficient power and sufficient track and terminals to place at the commercial mines in the Harlan district all of the empty cars that are available for that district; and assume that it has sufficient motive power to pull all of the cars the mines are able to load; and assume that in addition the company has ample power to place private cars, empty private cars at the mines using private cars, and to pull the loads when those private car mines load the private cars up to even 100 per cent of the requirements of those private car mines. Do you consider that the commercial
3084 mines have a right to require the railroad company to keep its facilities idle merely because cars are not able [sic] available to supply them to the same extent as the private car mines?

A. That is not the situation that exists, Mr. Director, and what I think about it——

Q. (Interposing.) I am asking you.

A. What I think about it, I do not feel it is incumbent upon me to state. It is not the state that exists at the present time.

Director BARTEL. I think that is a fair statement Mr. Northcutt asked you about. (1982) That condition may exist.

Mr. NORTHCUTT. It is existing today, and has existed for weeks, Mr. Boyd, and you know it has.

The WITNESS. No; I don't know it has, or anything of the kind.

Q. (By Mr. NORTHCUTT.) That your mines are receiving every car they order.

A. The director just called attention to a 73 per cent car supply this month.

Director BARTEL. You stated that was all they wanted.

The WITNESS. I stated, based upon what I knew up to the time I had left home, and the figures I have seen since. If this 73 per cent is in there, and properly reflects what the car supply is on the Cumberland Valley division, it is not satisfactory. (1983)

Q. (By Mr. NORTHCUTT.) My question to you was this: If we have ample power to place at your mines all the empties we have available, whether it is 40 per cent or 60 per cent or 80 per cent, would you still object to our supplying the private car mines 100 per cent,
3085 assuming that they supply the equipment when we have the power to perform that service for the private car mines? Or would you insist that the power and the tracks be kept idle to that extent, merely because the cars were not available for the commercial mines to a full 100 per cent?

A. That is not a question alone of the facilities of the L. & N. Railroad. It is a question—I don't believe a car shortage exists. I believe that there are enough cars owned by the L. & N. Railroad, if they are handled expeditiously and not delayed in the movement, loaded and empty, to supply our mines, and then it is a question of the proportion of the available transportation, or the capacity of the L. & N. Railroad to handle the business.

Q. (By Director BARTEL.) Now, won't you answer Mr. Northcutt's question, please? (1984)

A. I say no. I would not be satisfied with that, because of these other conditions.

Q. (By Mr. NORTHCUTT.) Let us assume that the Sanford-Day Iron Works at Knoxville—you and I are familiar with Knoxville—has private cars and owns a coal mine in the Harlan district, 100 cars a day, and that they own a sufficient number of cars to serve that mine to the extent of 100 cars a day. Let us assume that Toledo is congested, Detroit is congested, and Buffalo is congested, and that there is a back-up on Cincinnati, and that we are unable to shove anything more through Cincinnati; make an extreme case of this, now. Would you under those circumstances say that the Sanford-Day Iron Works should be denied the right to use its cars to move 100 cars of coal a day from the Harlan coal field to Knoxville? (1985)

A. Yes; because you have not complied with your obligation under the law to furnish adequate transportation to us. (1986)

3086 A committee of our most prominent operators conferred with officials of the Louisville & Nashville Railroad Company along about last February, looking to the acquisition by the Louisville & Nashville of additional coal-carrying equipment. I think it was six or seven thousand cars. It is true that the company purchased 1,000 more coal cars than we asked the railroad to purchase, but if adequate transportation is not given in the movement of those cars they would not be adequate.

Q. (By Mr. NORTHCUTT.) Well, was it or was it not your judgment at that time, Mr. Boyd, that the coal-carrying equipment of the

Louisville & Nashville, when increased by the number of cars (1987) you and your operators at that time requested it to purchase, would be adequate to care for any reasonable normal movement of coal that could be expected to move from the mines served by the Louisville & Nashville Railroad? Wasn't that the basis for your figures?

A. With proper transportation, I think that is true, but still you must not overlook one of the greatest causes, and that is the limiting factor in this Harlan field for handling cars. That is the very important factor. That these cars were needed, there isn't any doubt on earth in my mind, even the 1,000 cars more than I stated we thought the Louisville & Nashville needed, based on past performance. Of course, those cars have not been delivered yet. Some of them have and some have not. Therefore, we haven't had the service at all, but even when we get the cars it is very evident, with the limiting factor on the Cumberland Valley Division Railroad, it is not going to give us adequate transportation. More is needed than these cars.

By Mr. NORTHCUTT:

There is objection to the handling of these private cars, so long as you do not get an adequate supply of cars to our mines, because
3087 the contribution to their use of the transportation facilities is an unknown quantity. (1988) Their use of the available facilities is an unknown quantity. In other words, we could not determine with any degree of accuracy whether the use of the facilities of the L. & N. Railroad has deprived us of more or less cars. I don't assume that it has. I think it is the fact that they have. That is based on careful study and observation and belief. As to whether I know of any period other than during the shop strike when there was an inability on the part of the railroad company to move from either Cincinnati or Louisville into the eastern or southeastern Kentucky coal territory all of the empty cars the company was able to get from connections at those points, my answer is yes. There has been congestion there. There has been instances when our car supply seemed to improve that the Louisville & Nashville has shut off empties coming from the north. Having that in mind, it is a very simple matter, when the transportation facilities other than cars are taxed, to shut off cars from connecting lines, and then claim it is the shortage of cars. (1989) The Louisville & Nashville shut off cars from the north several times. They did it only a few days ago. You told me about it yourself.

Q. (By Mr. NORTHCUTT.) And what was the car supply at the mines at that time?

A. 100 per cent, since the first of October.

Q. And do you know for what length of time it was shut off?

A. You told me two days.

Q. And you have had 100 per cent supply since then?

A. No; the examiner called attention to a 20 per cent supply—

Q. (Interposing.) That was before the cars were shut off?

3088 A. No; it was the 13th.

Director BARTEL. That was the week ending October 13th.

Q. (By Mr. NORTHCUTT.) The shut-off was the 15th, so that that shut-off has not disabled you from receiving 100 per cent car supply ever since that 48-hour shut-off?

A. I don't know what the car supply has been since the 15th. I was surprised to know it had been below a hundred.

Q. (By Mr. GUTHEIM.) Mr. Boyd, assuming the circumstances under which you said to Mr. Northcutt that you would not admit the private car owner should receive all of its own cars available, that there was a coal shortage in the country, would you still take the position that the private cars could not be placed at the owner's mine if in excess of the distributor's share of the pooling of commercial cars to the commercial mines?

A. I think that should be done by the commission under its emergency powers.

By Mr. GUTHEIM:

I think the commission's emergency power is the most efficacious way that has been yet suggested. As to conditions in May, 1922, they were ideal in the sense—I ought to qualify that—I don't think they were altogether ideal. Transportation conditions were better than they had been for a long while. They got the cooperation of connecting lines in every way; congestion was avoided. Special attention was paid to the movement of coal, and the most efficient service that I have known them to give in any period of shortage was given. Car conditions were fairly good; 80 per cent car supply on the Cumberland Valley. (1991) Power conditions were good.

Road conditions were not any greater, of course, than they were

3089 before. Conditions of movement were good. As to the effect of the shop crafts strike, we felt it right from the beginning, almost. The strike was the first of July, I think, and ended the first of September—along in there, shortly afterwards. It continued in July and August. We felt the effects for some time thereafter. Of course, that affected the power materially, so much so as to cause a constant shortage. (1992) The extent of it I can't say. I don't keep posted on the engine failures on the L. & N. Railroad, or the number of engines white-leaded, or the number of engines in need of heavy repairs or light repairs. I couldn't keep track of that. Outside of those details, it is my opinion, being on the ground, that the lack of power affected the movement of traffic. I think it did all over the country. I don't think the situation on the L. & N. was worse than a good many other railroads. As to whether private car mines lost working time as well as system car mines, I haven't the figures. I haven't looked them up. The privately owned mines are not members of our association [except] the Melcroft Company. (1993) That company reports if it loses time. I see their reports every week. In July, 1922, according to my record there was no unassigned car at

Coxton and Kayu. At these mines they were entitled to order at Coxton 353 cars. They actually ordered 350 in July, 1922. They were supplied with 42.4 cars. This statement does not show any cars were assigned there.

By Director BARTEL (1994):

They lost time. So did all the others. Here is "lost during the month, account of transportation, 176 hours at each mine."

3090 By Mr. NORTHCUTT:

There are many, many of the mines in here that lost approximately the same number of hours.

By Mr. GUTHEIM:

This does not indicate whether these mines were then working on the private car basis. I don't know whether they were. I have no other information. (1995) I have been in Washington repeatedly on the transportation situation. (1996–7) As to whether I came at any time and made a specific request on the American Railway Association or on the Interstate Commerce Commission for a specific number of cars to be placed on and kept in service on the Louisville & Nashville, I think we went before Mr. Spens, Federal fuel distributor, and he did order 4,000 cars to the Louisville & Nashville & Nashville is equitably prorated betwen us and others in the but not within the limit prescribed in the original order. (1998) As to whether I specifically requested that the powers in Washington see that the L. & N. had in its possession constantly the equivalent of 82 per cent of its coal car ownership, I have had that up with United States Senators from the South at meetings where you were present. I have had it up a half a dozen times, urging that the L. & N. people be kept in an equivalent of 82 per cent of its ownership of coal cars. That was not at one meeting. It was in all of them. As near as I can recall, you (Mr. Gutheim) were the one who prescribed either 82 or 83 per cent to the United States Senate. The original figure of 82 per cent was when we were before a committee of United States Senators, and in order to relieve these distressing conditions on the Louisville & Nashville you made the promise that the car service section of the United States Rail-
3091 road Administration would undertake to increase the delivery to the L. & N. Railroad until it equalled 80 per cent. (1999) Later the 82 per cent came along, and it very closely coincided with your 82 per cent. We came down here and asked for cars in 1922, because the connections of the L. & N. would not or could not return their cars and we were short at our mines on things of that kind. As to whether the L. & N. at that time was equipped with power sufficient to take those cars to the mines when they got them, I don't know. I presume they were. As to why if they were not, we asked for them, we needed cars. The question of getting them there was the problem for the L. & N. to solve. If they were short, I don't know it. I know that the L. & N. were in sympathy with our efforts to get those cars. (2001)

By Mr. GUTHEIM:

Mr. Boyd, with respect to the power of this commission, or some other authority, to relieve the fuel shortage, I would like to ask if you ever made this statement to the members of your association [in a report for September 15, 1922]:

"Again the discontinuance of the Hoover program, the abandonment of the district fuel committees, and the futile efforts of the fuel commission and the Interstate Commerce Commission to relieve the shortage of coal throughout the country are striking examples of the utter failure which must inevitably result when the Government injects itself into a situation in which it has had so little experience and practically no knowledge."

The WITNESS. To relieve shortage of coal. That is the principal thing. The shortage of coal was not relieved. (2002) However, if I may be permitted to add, the car service division of the American Railway Association, in conjunction with the Interstate Commerce Commission's director of public service, has materially benefitted us so far as the supply of coal cars coming into the field
3092 is concerned that is an entirely different matter from a question of relieving a country-wide shortage of coal.

By Mr. GUTHEIM:

As to whether "the nature and trend of the coal traffic in the few months preceding July, 1922, contributed to the car shortage on the Louisville & Nashville in the months shortly thereafter," I presume it did. I don't know. As to whether because of the strike situation our coal moved in extraordinary routes and over extraordinary distances, I don't think there was coal moved to any destination that we did not usually ship coal to, except perhaps some points in the Pittsburgh territory, which was no greater distance than the movement of coal to points in the West—comparatively the same distance. (2003) The destination points may have been changed, but the same general territory. All mines contributed to that situation in relieving the country—the Chesapeake & Ohio, did, the Norfolk & Western, and the Western Kentucky, in fact, shipped a good deal of coal, because while they had union labor they had a contract that did not expire until the following year. I do not think that incident to taking care of the country needs at that time the coal had to move to rather extraordinary destinations and for rather longer hauls than usual, because we would have had to have some new rates, and with the exception of some lines up in Pittsburgh we did not get any. There were some rates established from Alabama to that territory that were limited rates, that is, they expired on given dates. That coal moved up there, which was an unnatural movement and not a normal movement, but generally I think
the bulk of the coal from our field moved to the territory that
3093 it always moved to. (2004) I don't know how considerable the movement was that did not ordinarily take place. There

was some. I think it is true that one of the reasons why the particular help of the American Railway Association and the Interstate Commerce Commission was sought was to get the cars back; that they tried their best to get cars back to the mines that were operating—not only in our field, but in every other field. With respect to the figures in Exhibit 43 showing private car mines receiving more than 100 per cent distribution, I do not know the rules under which those private cars are operated on the different railroads of the country with respect to home routing and home destination. (2005) I think that without regard to the rating of the mines, when the cars of the Melcroft Coal Company or any other private car owner get to the L. & N. they are taken to the particular mines and there placed on the tail-track. Perhaps that accounts for the excess over 100 per cent of this distribution. The same is true when we get into a period of car service with respect to system cars and the tail-track is loaded up with railroad cars, "and they use them, if it is in excess of the rated capacity, and if they use them the orders increased to the number they use, and they are credited with 100 per cent." That makes no difference at all in a period of car service. (2006) As to my Exhibit 43, I just used the number of cars actually put in that field, and distributed them pro rata, based on mine ratings or order, if less than mine ratings. As to whether that was regardless of the ownership of the car, it was just to illustrate the point. It was not a claim that the commercial mines were entitled to use the private cars. I didn't say that at all. May and June, 1922, was, I think, a period of maximum
3094 demand. A strike was on then. (2007) With respect to Exhibit 44, on March 1, 1923, the mine ratings were revised by the Louisville & Nashville Railroad Company, and that accounts for the drop from February. As to the drop in July, 1923, in the cars ordered, in that month the percentage of cars supplied to commercial mines was very much greater, due to the fact that the orders went down, and the orders went down because there wasn't any market. (2008) I want a sufficient car supply and an adequate car supply. An adequate car supply does not mean 100 per cent, but pretty close to it. (2009)

Q. By Mr. GUTHEIM. Is this Exhibit 45, Mr. Boyd, anything more, or intended for anything more, than an exemplification of the basis of your long standing quarrel between the difference with the L. & N. on coal car distribution?

A. It was intended to show, Mr. Gutheim, that in addition to all our other troubles, which are many and varied, we have an unequal distribution of cars as between divisions. That has been a very serious matter to all of us, and that exhibit there shows the extent of the unequal distribution between divisions. In other words, if we had gotten all through the period an equal division of the cars available in our distributive share, the comparison with the privately owned cars in Harlan County would not have been so

ronounced. We did not expect in this proceeding, of course, to ectify that situation. It was not submitted for that purpose at all.

By Mr. NORTHCUTT:

That has been a subject of discussion between the railroad com- any and these operators for a long time. I am not at all presenting hat for any action now, " just to show one of the contributing factors in our situation."

3095 (2013) W. L. HAMMOND, called as a witness and having been duly sworn, testified as follows:

Direct Examination by Mr. BOYD:

I am vice president and general manager of the White Star Coal Company. I am primarily engaged in the business of operating a coal mine in the Harlan County district of Kentucky. (2014) So far as I am individually concerned, my company is in the public utility business, the parent company. I have been connected with the White Star mine seven years or longer. That mine was opened about the year 1911 and on June 1, 1917, had a capacity of about six or seven cars a day. It was operated as a commercial mine, mining coal for domestic consumption until June 1, 1917, when it was sold to the American Light & Traction Company. They acquired the property for the purpose of furnishing a good, dependable supply of gas coal to the Detroit City Gas Company which is one of their subsidiaries, along with the White Star Coal Company and other public utility plants in different parts of the country. (2015) We do not ship any coal commercially. It is not our business to. I have been compelled to on one or two occasions. At times on account of great shortage we have been compelled to make contracts over a length of time, and it would later develop that the car supply would get better, and while we could not use the coal ourselves under those conditions, in order to run our mine and reduce overhead expenses, we have at times disposed of some of our coal. I think I disposed of 60,000 tons for export. This year we have not sold coal commercially. We would rather have the coal in the mountains than sell it at low prices. We have increased the capacity of the mines. The mines have developed a potential capacity, when in full operation and with a labor supply sufficient, of about 2,250 tons per day, I should judge. I think I have loaded that much already. The American

3096 Light & Traction Company is engaged in the public utility business, (2016) street railways, gas plants, and electric light plants. They own a number of plants scattered over the country—the Detroit City Gas Company, the Milwaukee Gas Light Company, the St. Paul Gas Light Company, and the public service utilities at San Antonio, Texas, and the St. Joseph Gas Light Company; the Consolidated Gas of New Jersey, and Binghamton Gas Works, and several other small ones scattered around at Grand Rapids, Muskegon. The physical properties and character of the coal produced at the

White Star mines is along the same lines as testified by Mr. Rust, as being coal that is necessary for use by by-product coke ovens and gas plants, which for the sake of brevity it is not necessary to go into. However, we found it to be absolutely suited to our purposes in making gas and coke and such matters, and that was the reason for our purchase of it. We tried out twelve cars of coal before we bought it. There is a good grade of gas and by-product coal produced in Harlan County. (2017) As to whether there are other coals produced in Harlan County that are not so desirable, there is an inferior grade of coal produced there which we have found out much to our disadvantage and sorrow. We are located on a seam of coal locally known as the Wallins seam, a very big seam of coal, and our mines touch the mines of the Fordson Coal Company and the Wallins Colliery Company, and we are in the same neighborhood as the Kentucky-King Coal Company. There are five or six mines operating in this Wallins seam of coal. As to mines operated by subsidiaries of public utilities or industrial mines in Harlan County, the White Star Coal Company is owned by the American Light & Traction Company; the J. L. Smith Coal Company is either owned or controlled by the Huntingdon Light & Power Company; the Harlan-Keioke Coal Company ship their output to some public utility; the King-Harlan Coal Company is owned by the
3097 Detroit Edison Company; the Kentucky-King Coal Company is owned by the Consumers' Power; the Nucome Coal Company is owned by the Upson Nut Company, and the Black Mountain Coal Company, I understand, is controlled in some way by a public utility either at Cleveland or Chicago. (2018) I am not sure of that. Their engineer told me one time that their coal went to a public utility for public utility purposes. The companies I have mentioned have no assigned cars. Other mines in Harlan County sell their coal to public utility by-product plants and others. It is sold in large quantities at different times from such mines as have the right character of coal. The Fordson Coal Company recently bought cars, and by reason of those cars they have been enabled to operate their mines every day. Last February we were only able to operate four days, and it was then that we had to go on the open market in order to get a dependable supply of coal over a period of time for our Detroit property. I tried to purchase that coal in Harlan County and was not successful, for reasons, and some of our purchasing agents went over in Virginia and made a contract with the Consolidation Coal Company for a year's partial supply of coal at Detroit. (2019) We base that on certain information we had that it would be unwise to depend on over two days' work a week for that summer, fall, and winter. I don't care to divulge the name of the party. However, it was in the nature of an informal talk with an official of the L. & N. Railroad, and that was his personal advice to me. I went to him to ascertain if I could, before making our contract. We didn't want to buy any coal except what

we had to, because we had developed our mines at an enormous cost, and that was his advice.

By Mr. BOYD: (2020)

That contract was made, I think, just prior to the first of April. I think the deliveries of coal were to begin the first of April
3098 and continue over a period of twelve months, and we arranged our purchases so as to take care of the situation based on the White Star Coal Company operating two days a week. Ever since that time we took the coal on our contract as we agreed to. We ship our coal to Detroit by Cincinnati and over the connecting lines, New York Central, sometimes the Pennsylvania, and until recently the C. & M. by Jackson, because we got quicker delivery. However, on account of some recent changes in rates we do not ship by Jackson any more, and all our coal goes by Toledo now. I am interested to some little extent in the parent company, the American Light & Traction Company. (2021) I am not an officer of that company. We have very good facilities in Detroit for unloading the cars. There is no unusual delay, and the delivery of the Michigan Central and Pere Marquette is very prompt, and they are just as prompt in taking the empties out, and I don't know of any instance where the cars have been delayed more than 24 hours, and generally they are pulled three times a day. The coal is unloaded at once and carried by pivoted overhead conveyers to the crushers. It is not done with a locomotive crane, but it is an expeditious way in which to unload it, and it is unloaded very promptly. The coal used by the Detroit Gas Company is similar to that described by Mr. Ford, if not the same character altogether. We are cut through into each other. Our property adjoins. It must be good, high quality volatile coal in order to make good gas, coke, and other things. (2022) We think it is just as necessary in the operation of our street railways and gas light plant to have as high grade and uniform coal and in sufficient quantities as that of the other public utilities mentioned at this hearing. I don't see any difference in the necessity of the American Light & Traction Company subsidiaries requiring good coal from anyone else engaged in a similar business. At times we have been faced with congestion and embargoes. We are notified at times of embargoes and of these different transpor-
3099 tation difficulties with which we are all familiar. I can't say that during such periods I have noticed any marked decrease in the coal car supply at mines using private cars in the Harlan County field. So far as I have been advised or looked at the record, the mines having privately owned cars have generally enjoyed a pretty good car supply. I have not gone into that matter enough to know exactly. I have to some extent. I have gone into that matter for the nine months ending March of this year, because it was a time when we had to go in the open market to buy coal. (2223) I have an exhibit showing the car supply at our mines

in Harlan County beginning in July, 1922, and extending to March 31, 1923, inclusive. The reason I selected those months is because we had some labor trouble in that district last year in 1922, and it was only about the first of July we were able to operate with any degree of certainty, and the reason I stopped with March was because that was the time we had to go on the open market and buy this coal. This exhibit was compiled from the records of the White Star at Kentucky and is a true statement. It shows for the nine months ending March, 1923, we ordered 7,725.3 cars; we were supplied with 1,862.3 cars. The per cent of cars furnished on orders was 23.92; the total days cars furnished in nine months, 546 [sic]. (2224) There was an average of six days' car supply per month covering a consecutive period of nine months. In the month of February we were supplied with cars four days. That is when we got scared and went on the open market. The Louisville & Nashville in the Harlan County field distributes cars on what we call the "round robin" system. When they furnish us cars they furnish us a full day's supply, which is preferable from my viewpoint to prorating the cars among all the mines that want them, because that breaks them all up. When we get cars at all they furnish us with a full day's supply, based on our rating. I have another 3100 exhibit which shows a comparison of the coal car supply at mines in Harlan County using private cars with the coal car supply (2225) at mines of the White Star Coal Company using unassigned system cars for the month of March, 1923. It is a correct statement, compiled from the best records available.

(The papers referred to were offered and received in evidence as Exhibits No. R–48 and R–49.)

The reason I selected this month was because it was the first month, as I understand it, under which the Fordson Coal Company operated exclusively on assigned cars. It may have been before that. The month previous I think they did, but not all the months, as I was informed, and it was also the last month that we operated until we had gone on the market and received coal under our contract. That exhibit shows we received of system unassigned cars 24.86 per cent of our order and the assigned private car mines received 85.9. (2226) It is my understanding that this rating that I have of 810 cars which I ordered in March, 1923, reflects our ability to load the coal. I don't think the new rating changed me very much. I don't remember now. We were not inflated. In the latter part of 1922 we increased our capacity by taking on men. We already had the physical development necessary to load the coal, and we took on a large number of men in anticipation of a larger car supply when the shopmen's strike was over, which did not develop, and we had to let a lot of these men go, which put us on a lower capacity each day. I don't recall the exact rating when we took on these extra men, but I do know that we loaded sometimes in excess of 40 cars a day. (2227) When we didn't get relief when we expected it,

we let a lot of these men go, laid off a lot of these men, and at the same time closed down one of our openings, and later another, and at this time we have two of our mines at White Star that
3101 are not in operation. The American Light & Traction Company has not been able at all times to secure the amount of coal needed because of inadequate transportation [at these mines]. We received a good supply of coal in the year 1921. To make up the shortage at our mines we have had to make purchases from other localities and also in Harlan County. In the fall of 1923 we were compelled to go on the market, and I bought large tonnages from neighboring mines and had to pay some of them $6.25 a ton. (2228)

Q. (By Mr. Boyd.) * * * While you were ready and willing and anxious to mine and ship your own coal, you have been forced to buy from others because of inadequate transportation?

A. Yes, sir. I presume that is what you would call it—inadequate transportation. They said it was due to car shortage, but I don't believe myself that we have a car shortage, although my opinion doesn't amount to anything.

By Mr. Boyd:

The Detroit Gas Company at Detroit need all our coal, or we would not have gone on the market and bought it. The Detroit Gas Company purchased gas from the Ford Motor Company. We are purchasing coal gas now from the Ford Motor Company and also from the Semet-Solvay people and the Michigan Alkali Company. We are purchasing coal gas there now from three concerns, I guess, and we are also manufacturing a considerable quantity of water gas, in addition to the coal gas we purchase and produce. Our send-out in Detroit at this time is averaging about 50,000,000 cubic feet of gas per day, of which amount about 50 per cent is water gas, and of course with the different seasons of the year the requirements and the send-out vary, but that is about the average now. (2229) We use our by-product coke in the manfacture of our water gas. We, the Detroit City Gas Company, are making water gas out of the coke at this time. As to whether the Fordson Coal
3102 Company move in their private cars from their mines adjoining ours coal which is used in making gas at Detroit and sold to us simply because we can not mine and ship our own coal because of inadequate transportation, my answer is "yes." We have bought gas from the Ford interests there for years past. We have been doing that all along. I don't recall an instance in which we have not been compelled to buy gas from Ford—or rather we have bought it. I have had experience prior to 1917 and some since in mining and marketing coal for commercial consumption. The situation in the Harlan field in respect to the mines shipping commercial coal is this: One of the most serious things I see in the use of the assigned car is its effect on labor. (2230) I have had this experience alongside of the mines of Mr. Ford. He operates every

day. It enables him, as his manager said, to secure a dependable, efficient class of men. It almost eliminates the turn-over, and we are confronted with exactly the opposite condition when we are operating two days a week in the same neighborhood, adjoining his mines. Our labor is discontented, so far as I know, and I am familiar with that is true of other mines in the district. That is a sort of trouble and annoyance, and it is a serious trouble. In fact, "the car supply has been so short—was, up until last spring, and, of course, we are doing that now, we have had to give our men coal and house rent free for a period of over 18 months by reason of the poor car supply in 1922 and the early part of 1923, and the fact that we are enabled to operate only two days a week now, unless we sell our product and we decided not to do that any more." That is the reason we are operating two days a week. I don't suppose, however, we could sell it now, because the price is so low. And another thing, it increases your mining cost enormously. Mr. Ford's manager had the figures as to his maximum cost of production which are a little bit startling to me, but I expect it was about
3103 right in his case, but there is no comparison in the cost. (2231)

I am a member of the executive committee of the Harlan County Coal Operators' Association. You [Mr. Boyd] have correctly stated the position of the Harlan Coal Association. I believe that the decision of the commission is the only equitable basis. I believe in everybody getting a fair chance at everything. I don't believe in one operator in any character of industry being preferred to the exclusion of another, (2232) because it builds up a monopoly. It decreases the cost for one and increases the cost of operation for another and it is unfair. The American Light and Traction Company has considered the construction of coal cars for their private use. We decided in 1919 not to purchase them for the reason that the board thought and concluded that it was the duty of the carrier to furnish transportation. As to whether we had ample funds at that time to provide ourselves with new equipment, I suspect we would have had no trouble in securing whatever equipment we needed.

Q. (By Mr. BOYD.) If the decision of the commission is changed and the present practice continued, what do you think will be necessary to protect your interests?

A. Mr. Boyd, I don't know, unless we either sell the mine or buy cars. That would be something we would have to figure out later on.

3104 (2233) I would hate to have to come down to a proposal like that. There are so many industrial mines in our district having no private cars, and were they all to come to the conclusion to buy their own cars and we were to buy our coal cars we would——

Q. (By Director BARTEL.) Your answer is you don't know?

A. No; I don't know, Mr. Director.

By Mr. BOYD:

In so far as I am individually concerned, to get the cars would be my recommendation, as a matter of protection, self-preservation, rather than to take a chance on losing the money invested in the mines. If the transportation service of all character of the Louisville & Nashville is equitably prorated between us and others in the county, we are perfectly willing to continue in that way. All I want is just as many days' operation at my mine as my neighbor has. Let me have as much, even if we have only enough to supply one day a week. If the Louisville & Nashville can't give me more than one day a week, let it give Mr. Ford one day a week, or Mr. United States Coal & Coke, because we are all in the same district.

Cross-examination (2234) by Mr. BRONSON:

I have all the mine labor I need at my mines to do what little tonnage I am producing now. I do not know whether there is a surplus of mine labor in our district. From the understanding I have from Mr. Ford's coal manager, the labor turnover at my mine is about three times that at his mine. That is what he tells me is true, and I imagine it is. I would think so. I give recommendations to my miners when they are applying to him, but they don't all get in the Ford mine, because there is always a large waiting list at Mr. Ford's mine. At least they tell me so. (2335)
3105 We bought our gas from Ford years before Ford ever had private cars. I don't know whether the purchase of private cars by Mr. Ford changed our practice or not. That is a matter that the Detroit City Gas Company handles from time to time. I am not there all the time or any great part of the time.

By Mr. GUTHEIM:

A week or ten days ago is about the latest data I can give as to the gas we make at Detroit. We were purchasing from Semet-Solvay and the Michigan Alkali and Ford Motor Works approximately from 17,000,000 to 20,000,000 cu. feet every 24 hours, and the rest we were making ourselves. That would indicate that we were producing about 31,550,000 cu. ft. of gas a day a week or ten days ago. (2236) As to how that divides between wate gas and coal gas, there are 25,000,000 cu. ft. of water gas at this time, from the fact that we are using our coke in the manufacture of water gas rather than selling it on the open market. It is an economic proposition altogether. As to selling commercial coal, the Blue Diamond Coal Sale Company at one time, during one of the periods that I mentioned, handled a little coal for me, and I sold direct at one time for export during one of those periods when we were taking coal from the outside, when the car supply got low, to Jewett Bigelow & Company approximately 60,000 tons. They did not take all of that.

JOHN MARLAND, called as a witness and, having been duly sworn, testified as follows:

Direct examination by Mr. BOYD:

I would like to have permission to (2237) have read into the record a letter written by Mr. Alexander Dow, president of the Detroit Edison Company, and addressed to the Interstate Commerce Commission, dated Oct. 29, 1923, which has already been delivered to the commission.

3106 (Objection by Mr. Northcutt and Mr. Browder to admitting this letter in evidence was sustained, and the document was marked "Exhibit R-50" for identification.)

By Mr. BOYD (2238):

I am general superintendent of mines for the Harlan Company, located at Kildu, Ky., and one in Cambridge, Ohio. I have been engaged in this business for the present firm for the past two years and ten months. My company is a subsidiary of the Detroit Edison Company, of Detroit, Michigan, of which Alexander Dow is president. (2239) As to the coal-car supply at our mines in Harlan County, during the year 1921 we had practically 100 per cent car supply and continued so up to March 31, 1922, at which time we were affected at our mine by the labor strike, from which we did not recover until about July 1, 1922. After that time the car supply was short and continued so up to the present time, not having had a full car supply during any of that time with the exception of last week, that being the first time that we have had cars supplied to us six days since July 1, 1922. In June, 1922, we lost six days on account of no cars; July, 21; August, 19; September, 21; October, 21; November, 20; December, 8. (2240) The mines having assigned private cars have had practically steady operation. It has had the effect of causing our labor to be discontented, and our labor turnover has been possibly 200 per cent or more, the men not being able to earn a living at our mine on account of the short running time and being compelled, in order to get enough to eat, to seek employment elsewhere. As to whether the Detroit Edison Company has been ready during this period of car shortage to take our entire output, we have a contract with that company to take all the coal that can be produced at that mine. We do not sell a pound commercially. When we cannot furnish the Detroit Edison Company with a substantial amount of coal from our mines they go out on the open market and purchase the additional coal. (2241)

3107 That has been done. The Detroit Edison Company furnishes electricity, light, and power in Detroit and is a public utility. I do not concur in the views of eastern public utilities as to the necessity or need of a continuance of these privately owned cars. We have operated entirely without the use of assigned cars. Our consumption is approximately 1,200,000 tons per year.

By Director BARTEL:

We got a priority order from the Detroit Edison Company in 1922. That wasn't an assigned car. When that priority was given to us

in 1922 it was all of the available cars on the Louisville & Nashville division where that priority was placed, and placed at all of the mines on the L. & N. R. R. in that territory. (2242) As to whether we got assigned cars by reason of the fact that we were shipping to a public utility, I wouldn't term that as an assigned car. We got a priority order. We got a preference in the car supply for that short time for 800 cars. That was made necessary on account of our inability to get coal in order to keep the plant in operation.

By Mr. BOYD:

Our mine has operated this year as follows: In January, 4.96 per cent; February, 24.16%; March, 25.54%; April, 36.55%; May, 42.81%; June, 54.21%; July, 93.59%; August, 76.56%; September, 69.03%. As to whether it is just as necessary in the conduct of our business that we have a reliable, steady supply of suitable coal when needed, as in other public utilities, my answer is yes. It is necessary that we have a coal that is suitable to our needs. The coal produced at our mines meets our needs. The coal required by the plant of our parent company is coal of good suitable efficiency, a coal that will not fuse less than 25 degrees, of low ash and of low sulphur content for efficiency. (2243)

3108 Cross-examination:

Q. (By Mr. NORTHCUTT.) How many days did you say you lost in December, 1921, by short car supply?

A. Eight.

Q. Eight days.

A. Yes, sir.

Q. Well, I find from the car supply record that you had during December, 1922, a 33 per cent car supply, so that on a 33 per cent car supply you only lost eight days?

A. That is probably true, due to other causes. In this report I have just stated the number of days we lost owing to car supply, and didn't take into consideration any days lost that the railway was not responsible for our losing.

Q. That wouldn't affect the percentage of car supply. You had a 33 per cent car supply. You got 33 per cent of the cars that you ordered during December, 1922, and I understand that on the 33 per cent car supply—that is 33 per cent of your order—you only lost eight days' working time on account of short car supply.

A. I did not make up this record myself, Mr. Commissioner. There may be an error in these eight days. I have before me a report made by the Harlan County Operators' Association, (2244) which shows that our mine lost on account of transportation that month 138 hours. Now, there has in all probability been a mistake made. It might be a typographical error and should be 18 instead of eight.

Q. There is a mistake somewhere?

A. Yes, sir.

Q. (By Mr. BOYD.) But that report does show the number of hours you stated?

A. Yes, sir.

Q. And that is compiled from the official records of the railroad?

A. Yes, sir.

Q. (By Mr. NORTHCUTT.) You say that statement shows a loss of 138 hours, due to car shortage?

3109 A. Yes, sir; and this report is made up from the records sent out from our office.

Q. (By Mr. BRONSON.) How much time was lost from other causes, or does that report show?

A. It does not show.

Q. (By Director BARTEL.) The railroad records would not show how much time was lost at the mine due to other causes?

A. This record would.

Q. Mr. Boyd asked if you got that from the railroad record.

Mr. BOYD. Transportation shortage.

The WITNESS. This was from the Harlan Operators' Association (2245) Mr. BOYD. He said "all other causes."

By Mr. GUTHEIM:

I am general superintendent of all mines of the Detroit Edison Company. In addition to the mines on the L. & N. R. R., we have one on the Pennsylvania Railroad, at Cambridge. There are no others. My office is in Cincinnati, Ohio. The connection I have with the work of the Detroit Edison Company other than superintending its mine operations is assisting in the purchase of its fuel. At the present time there is not any coal being received from the Ohio mine on account of its being closed. (2246) The entire output of our mine in Kentucky is used and consumed by the Detroit Edison Company either at its Detroit plant or at its Port Huron gas plant. That was in 1921, 166,000 tons. That was a year of full car supply. In 1922 it was approximately 95,000 tons. We were in a position to have produced over 200,000 had we had available a car supply. A very small quantity of this coal from the Kentucky mine goes to the Port Huron plant. As to how much, I don't remember that we shipped any during 1922. We have shipped approximately 5,000 tons this year. The Ohio mine has been shut down since May. We have obtained in West Virginia & Kentucky coal for our Detroit plant to supplant the coal that formerly came

3110 from Ohio. The Ohio mine is a union mine. (2247) Some of the West Virginia mines from which we have received coal are union mines and some are nonunion. We have not used any of the Ohio coal this year on account of it being unsuitable to our needs on account of high ash, low sulphur, and low fusing point. The basis on which I say that private cars are unnecessary for any public utility is on account of it causing an unequal distribution of cars and unequal running time at the different mines, causing an inflation of cost at one mine and a decreased cost at another mine.

I express that opinion from the standpoint of the mine and the mine operation (2248) and from the point of purchasing coal for the Detroit Edison Company.

Q. (By Mr. BRONSON.) If you could, by the use of private cars, secure coal, why don't you do it? What do you care what the other mines do?

A. On account of it being a matter of opinion that if a much larger number of operators purchased their own cars it would only be a question of time until this same case would come back to the Interstate Commerce Commission, and they will be forced to make a ruling such as already has been made and put into effect.

By Mr. BRONSON:

I am employed directly by a subsidiary of the Detroit Edison Company. I was employed by the Detroit Edison Company. The officers of the mining company are officers of the Detroit Edison Company. (2249) The Detroit Edison Company stores considerable coal. We have at the present time over 400,000 tons in storage. I said that during car-shortage periods we were compelled to go out and buy coal in the market. We have also gone to the expense of putting in a storage plant at our mine. We have gone to the additional expense of spending $30,000 erecting a storage plant at the mine in order to be able to produce as much coal as possible, and decrease our cost, so that at times when the railroads are able
3111 to serve us with cars we can take that coal out of storage and take it to our plant. (2250) We do not have surplus mine labor in our district. I think our labor turnover is greater than the labor turnover of the private car mines. I haven't examined their payroll, but I have examined ours. I have not kept a record as to where the men we employ come from and where the men who leave go.

By Mr. GREEVER:

I am not an officer of the Detroit Edison Company, just an employee, general superintendent of their mines, (2251) which are the one mining company with a mine located at Cambridge, Ohio, and the mine located at Kilduff, Ky. I purchase fuel. (2252) As to whether the present officers of the Edison Company purchased its coal in the past for many years in different mine fields and on different railroads, distributing their purchases so that they will be independent of any one field or any one railroad, my answer is, yes. That has been their practice all the time.

By Mr. GUTHEIM:

We still own the Ohio mine. It will not be reopened for the purpose of using it at our Detroit plants, until the plant that is now being constructed is completed, at which we expect we will be able to use the Ohio coal.

My Mr. BOYD (2253):

There are a number of grades of coal produced in Harlan County. There is a large amount of coal not so desirable as the by-product metallurgical coal and gas coals produced in Harlan County. That coal competes with other coal suitable for steam purposes.

H. B. TYREE, called as a witness and having been duly sworn, testified as follows:

3112 Direct examination by Mr. BOYD:

I am fuel agent of the Detroit Edison Company, Detroit, Mich., and have held that position since the first of July, this year. (2254) I have been directly in the employ of the Detroit Edison Company since 1919, and purchased some of the coal since 1920 and have been in the field for the Detroit Edison Company. That company is a public utility plant furnishing power to Detroit and the district generally in the southeastern part of Michigan, with a population of approximately one and one-half million. They also furnish heat to the city of Detroit, the central portion of Detroit, through their heating plants, and gas to the city of Port Huron. They furnish electric light to Detroit. Our consumption of coal is approximately 1,200,000 tons per year. We have approximately 435,000 tons in storage today. (2255) That is as a precaution against accidental and local interference with railroad service, slow winter movement of coal by railroads, and labor troubles. We figure on carrying ordinarily about 200,000 tons. I know these statements I am making to be facts. (2256) We figure on supplying the plant concurrently with coal from day to day, in addition to the reserve, without other rehandling. That means, of course, that in the summer we buy more coal to build up our reserves and in the winter we probably buy less than consumption, ordinarily. We purchase our coal in different mine fields and on different railroads, and distribute our purchases so as not to be dependent on any one field or railroad. Oftentimes we have encountered delay in the movement of our coal in cars. I would say that the time required to move coal from our mines in Kentucky to Detroit is about eight days, ordinarily. (2257) That is the average time of all our coal shipments. Many times the movement has been delayed by embargoes and congestions. In those cases we must either draw on our reserves or increase the number of cars rolling, to bring in the approximately 85

cars a day that we burn. As to whether it is as necessary for

3113 my company to have a constant dependable supply of suitable coal in order to keep our plant in continuous operation, as it is with reference to other public utilities, the same as has been testified to by other public utilities, I cannot answer for other companies, but we feel that it is extremely important to the good conduct of our company and our business to keep it moving in that shape, and of a certain quality. (2258) With the idea of getting a certain number of cars in there per day currently, the number of cars rolling has been as low as 550 or 600 cars, and it has been as high as 1,400 or

1,500 cars moving. I would absolutely be willing to share with others and accept our distributive share based upon the mine ratings. All we want is an equal distribution of the facilities of the railroad. As to whether I want that particularly if the failure to furnish us that adequate transportation is due to a shortage of motive power, congestion in terminals, etc., my answer is, yes. As a matter of delivery it has been our experience that we have greater difficulty in securing our coal in winter than in the spring and summer months. (2259) As to whether our coal is frequently bunched, arriving in Detroit in large numbers, congesting our own facilities and others, it does. We attribute that to a lack of transportation. "We try to buy the coal so that a certain amount—in other words, we are pouring a commodity into a funnel, and hope it comes out at the same rate at the other end." Of course, we realize that it cannot be absolutely done, but bunching would seem to indicate that there is some delay in the movement of transportation. As to our facilities for unloading and returning empties promptly, we feel that we have as modern equipment as can be bought. There is no detention to the cars after arrival unless they are bunched.

By Director BARTEL:

How much detention that would be would depend very much on exactly what we have to do with it. We distribute those to several plants. (2260) and heating plant coaling stations in Detroit, 3114 and if it came in on a day, for instance when Delray, one of our plants had, say, 40 or 50 cars, and they shot in 200, or more than that, as has been done, we would try to relieve the railroad of them as promptly as possible by putting them into the most convenient plant; I could not say just exactly. It is according to where the cars would go. They put in more than 200 cars. I think at one time it was 300 cars a day.

It took us several days to unload. We should be able to unload, I should say, a hundred cars a day. We have ample facilities to do that. Our requirements are about 80 cars a day.

Cross-examination (2261) by Mr. GUTHEIM:

We have two company mines that ship coal. We buy from a number of others. Not all, nor practically all, of that coal is routed into Detroit through Toledo. I could not tell the exact percentage, but we have sent quite a bit of coal by the D. T. & I., which does not go through Toledo; we have sent quite a bit by Jackson, Mich., Michigan Central, which does not go through Toledo; and by the Cincinnati Northern, by Alvordton and Wabash, which does not go through Toledo. There is quite a movement through Toledo. Because it is quite a chore to get a regular free movement of coal through Toledo is the reason we routed it the other way. As to whether it is also quite a chore to get a regular free movement through Cincinnati, it is, inasmuch as it is a hard job to get coal through any terminal. (2262) When conditions are bad we ask them for the best service. We never have put men out to see that

the coal gets in. We have checked where cars were at times. I ha done it myself, but I don't remember any time when we put m actually on it to check the movement.

3115 By Mr. BROWDER:

(2263) I think Mr. Marland testified the output of o Kentucky mine is possibly 18 cars a day, 900 tons capacity a da That is the capacity when they can ship it. I don't remember th we have had trainload movements out of there. I would not say th average running time of eight days was throughout 1921 and 192 Take, for instance, this last few months. We have had an averag time that would run about eight days.

By Mr. MARLAND:

As to whether it has taken as much as six weeks for our coal t get from the mines to Detroit during bad weather and serious rail road difficulties, my answer is, yes.

By Mr. BROWDER (2264):

I can not tell the exact difficulty on any one lot, but I do know, for instance, that in 1920 at various times I have known coal to tak six weeks to get up there, and I have known it to average approx mately 18 or 20 days to get to Detroit. That is during that stringenc and others.

By Mr. BRONSON:

We carry in storage 435,000 tons. That is approximately four months' supply in the summer, if we burn all that coal at once. That is not what we regularly carry. We regularly carry 200,000 tons, and if we got no other coal that would carry us approximately two months. (2265) That is not the reason that we do not use private cars. We have a very definite idea that it is unfair, and if you knew Mr. Dow, you would realize why we do not use private cars.

WILLIAM B. ORD called as a witness and, having been duly sworn, testified as follows:

Direct examination by Mr. GREEVER:

I live at Landgraff, W. Va., and am president of the Empire
3116 Coal & Coke Company. I have been connected with that company since 1890. That was at the beginning of the operation of the company. The Pocahontas field was developed in the 80's. This company (2267) is on the Norfolk & Western. Before we could open the mine and arrange for our transportation we had to make an agreement with the Norfolk & Western R. R. under which we [sic] agreed to furnish and build a coal car and a half for every coke oven that the lessees built. Then our cars were distributed on the basis of the coke ovens owned and erected; in other words, we paid for the transportation by the building of perfectly useless ovens; many of them never had fire in them and would not stand fire, and the coke business was never profitable.

By Mr. BROWN:

Later on the commission abolished that system. That was along bout 1904 or 1905, in a case brought by the Powhatan Coal & Coke Company against the Norfolk & Western Railway.

By Mr. GREEVER:

The objection to that basis of car distribution was that it was artificial and arbitrary and expensive. It caused a very great expenditure on the part of the coal companies over and above the freight rates they paid. These ovens were built at a cost varying from $300 to $600 and $700 apiece. The Norfolk & Western does not at this time operate any private coal cars, that I know of. (2268)

Q. (By Mr. GREEVER.) What would be the result if that practice were introduced?

A. Well, when the coke-oven basis of distribution obtained——

Director BARTEL (interposing). What is the use of answering questions about something that might happen?

The WITNESS. Because it is the same thing, sir, as the other. It is an artificial basis. When we wanted to develop our mines we built another oven or two. Our neighbors all did the same thing, exactly.

3117 By Mr. GREEVER (2269):

If we wanted to increase the development of our plants at all in those days we built a few more ovens. Our neighbors all went and did the same thing, and we were just where we started from. If the private car should get into the Norfolk & Western, those coal companies would all protect their rating or proportionate share of the transportation by building a proportionate number of cars, and putting them into service, and we would simply spend about $15,000,000 and we would land just where we were before. I am acquainted with the financial condition of the coal companies in the Pocahontas fields. I think they are able to do that. I have had experience in regard to the assigned fuel car. I had assigned cars at one time. It was quite impossible to develop your business on that basis, and I sold the Norfolk & Western a large block of coal at one time, in 1890, or 1891, I think, for which I got preferential cars in addition to my commercial cars. That enabled me to develop my mine (2270), to keep up capacity, and then when the coke-oven basis was thrown out by the Interstate Commerce Commission and the capacity rating put in, I got the benefit of the development, through the use of assigned cars. That was an advantage as against my neighbors who did not have such contracts. I am a member of the Pocahontas Coal Operators' Association, and chairman of their executive committee. I am speaking for all the Pocahontas operators in that association. That matter has been considered by them in a meeting of the executive committee.

Cross-examination:

Q. (By Mr. BROWDER.) If it was practicable for the operators in your field to build useless coke ovens, beehive ovens, in order to secure increased rating, would not the result of this decision be that if

a company owns a mine, and owns private cars, having a mine which can be developed, and the use of those cars, that it would over-
3118 develop its present property by opening a new mine or increasing the existing mines, so that in a car shortage it could have its necessities fulfilled?

A. I think that is a perfectly legitimate and natural growth.

T. F. FARRELL, called as a witness and having been duly sworn, testified as follows:

Direct examination by Mr. GREEVER:

I am second vice president of the Pocahontas Fuel Company, No. 1 Broadway, New York. That company is both a producing company and a sales company. (2272) Its mines are situated in the Pocahontas region in West Virginia and Virginia. It operates 15 tipples. One tipple may take care of two mines' output, but there are fifteen tipples. I should say these tipples are located in a territory about 20 miles square. All these mines are on the same seam of coal. The character of this seam is not the same at all places. There is a difference in its chemical analysis of, say 3 to 5 per cent in the volatile content; one, two, or three per cent in ash, in sulphur content, and in the phosphorous content. The total output of our company per annum is about three and a half million tons. (2273) I would say one and a half million tons, approximately, per annum, moves west. Nowadays, about one half of the coal of our company goes to by-product coke ovens and the other half is divided between domestic household consumers and in the shape of prepared coal and some little mine run for office buildings, apartment houses, etc.—city trade. We ship to those by-product plants from all of the mines at which we screen, and indeed all of them, including the mine run mine. Our company also purchases and sells coal from other mines in the same district, Pocahontas district, and Tug River district, and Winding Gulf district, and New River district, Kanawha and Thacker district—pretty (2274) much of West
3119 Virginia coal, in the southern part of the State. Very little of that tonnage goes to the West. We try, in the purchase of coal that way, to take care of our needs. We purchase coal in the East, and it releases, perhaps, our coal from our own mines for the West. In the Tug River Valley there are other seams operated than the one in which our company operates. There are more seams in the Pocahontas region, too. There is the Pocahontas No. 6 seam and No. 4. We operate in No. 3 only. Other seams are Beckley, in New River; and the Sewell seams, and a seam called Fire Creek. We do not sell any coal from these other seams to the by-product plants now. I do not. I have in the past, prior to my coming with the Pocahontas Fuel Company, sold it for the New River operators, to the same by-product plants, or those in existence at that time. They still continue to use it and buy it, I think. I believe the Solvay Company is a large by-product company. So far as so-called smokeless coal is concerned they have mines of their own in

the Tug River region and in the Pocahontas region in West Virginia, mining separate seams of coal. They have no mine that I know of on New River. They purchase coal throughout all
3120 those fields for their by-product plants. (2276) In order to get an idea in the record as to the places this coal goes to for by-product plants, I have made a memorandum from which I will read. It goes into the Buffalo territory, including Hamilton, Ontario; Baltimore, Cleveland, Canton, Youngstown, Midland, Pa., Toledo, Detroit, Chicago, Milwaukee, the Twin Cities, Duluth, Sault Ste. Marie, Joliet, Indianapolis, Terre Haute, St. Louis, and Hamilton, Ohio. It comes from all the different seams of coal mined in these regions, and for the same purpose. Anything that may be said as to the character and quality of requirements of by-product ovens, especially those that are merchanting or reselling, or selling coke produced by them to different trades ought to be considered. For instance, coke goes to householders for domestic use and coke made out of almost any character of coal that will coke, regardless of its phosphorous and sulphur content, will go there in a suitable way. However, those elements would not be satisfactory in coke made for steel companies making steel. There are a great many of these, or a number, at least, of these by-product ovens that are making commercial coke, that is (2277) coke to be sold to brick makers and bakers and householders and steel companies; even to smelters in the far West where, for instance, sulphur does not cut any figure in coke when you are smelting copper ore. They do not want it, and would a little bit rather not have it, or have no impurities in coke at all, but it is there, since it is in the coal coke is made of, and it is less objectionable to that class of trade than for steel makers.

Cross-examination by Mr. BRONSON:

Most of the coal we produce is shipped to tide. It is my understanding that the Norfolk & Western has never handled private cars as assigned cars. That railroad I believe secures some
3121 of its fuel coal requirements from its own entire output mines. (2278) As to whether I have ever found that the use by the Norfolk & Western for company fuel purposes of the entire number of cars its entire output mines require has interfered with our coal supply to tide, my answer is "yes." I would say it materially interferes. It has very materially affected our business.

Q. (By Mr. BRONSON.) You understand the fact that the service between the Norfolk & Western mines and tidewater is a shuttle service, the cars being entirely under the control of the Norfolk & Western?

A. You may call it a shuttle service, but I would agree to the last part of your statement, that it is entirely under their control; but I don't know what you mean by shuttle service.

Q. One that moves backwards and forwards.

A. They do, yes, when they are moving.

Q. You are prepared to say that the comparatively few cars out of the total coal car equipment of the Norfolk & Western used by that company for its fuel coal requirements have affected your car supply materially to tide?

A. Yes, sir; it is bound to.

By Mr. GUTHEIM:

I have had very long experience in the Pocahontas field. It is splendid coal. We say that it is the best in the world outside of Cardiff, if not as good as that, when we are in competition with some of our friends, but we also say that if you are making gas, it is not worth so much. We also say that in so far as making coke for steel is concerned, there is some distinction to be kept in mind as to the necessities of particular coke for steel. (2280) The Norfolk & Western service for its bituminous mines was for many years accepted as a high-grade service. I am satisfied with that service.

As to comparing that with the situation elsewhere, I can not
3122 testify for competing fields in that regard. We do not operate in any other fields, excepting in this way. We have a mine on the Virginian Railroad (2281) that is mining Pocahontas No. 3 seam coal, the same as on the Norfolk & Western, and it adjoins that. To that extent we have those mines. The Virginian service is customarily a good service except as it has been broken in recent years. I do not know what per cent of the coal that I ship is used in the brass industry or whether any is used in that industry or in the copper industry. As to whether the Pocahontas coal is a standard and accepted coal for the production of coke for water gas manufacture, it used to be when we made coke in beehive ovens in our coal field. Then it was, because that coke was a comparatively light, porous coke. What the result of making that same coal into coke in by-product ovens for water gas purposes is I do not know.

A. R. YARBOROUGH, (2882) called as a witness, and having been duly sworn, testified as follows:

Direct examination by Mr. GREEVER:

I speak for all the operators in the Kanawha and Coal River districts of the Chesapeake & Ohio Railway and the New York Central Railroads. I am traffic manager with those people. I have prepared a statement which I wish to introduce as an exhibit composed of three pages, the bottom, page 3, captioned "Statement showing cars ordered, supplied (2283), and percentage of supply, by districts, served by the Chesapeake & Ohio Railway, for the months of January, February, and March, 1923." That statement covers all the total number of unassigned cars ordered, supplied, and the percentage of supply for the entire three months.

(The statement referred to was received in evidence as Exhibit No. R–51.)

3122a On the botton of page 3 you will note that there was ordered a total of 365,173.2 cars; supplied, 110,686 cars; percentage of supply based on the order, 30.3 per cent, to be exact. Page 2 shows

the same information covering assigned cars supply which shows an average percentage for the three months of 87.7 per cent. The top page shows the consolidated statement of the assigned and unassigned cars, the same information, which would indicate that the percentage to all mines served by the Chesapeake & Ohio, both unassigned and assigned, if all equipment had been prorated equally, would be 35.3 per cent, or an increase of 5 per cent.

By Mr. BROWN: (2284)

I include all cars that the Chesapeake & Ohio Railroad mines order and are supplied, including their Eunice, Sarita, and Dorothy mines; also the entire output mines. It also includes private cars and assigned cars for foreign fuel, and all cars that are assigned by the Chesapeake & Ohio Railway. On the bottom of the top page I show the increase in "percentage of cars based from 30.3 to 35.3 per cent of cars ordered is equivalent to an increase of 16.5 per cent in the total number of cars supplied to the unassigned mines."

Cross-examination by Mr. BRONSON:

As to why I picked out these three months, the months of January, February, and March, 1923, were months that we had a very poor car supply. (2285)

By Director BARTEL:

I can not say that those are the months the we ordered more cars on the Chesapeake & Ohio than in any previous month.
3123 I can say we had more orders for coal at our mines on the Chesapeake & Ohio during those months than any time since. I am quite sure we could have loaded the rating if we had been furnished cars every day. It is a question as to the rating on the Chesapeake & Ohio Railroad. The facts are, the mines were rated by the Chesapeake & Ohio under C. S. 31. On March 10 the ratings were reduced 30 per cent arbitrarily. An investigation under the new rules which were approved by this commission brings those ratings back today within 300 cars of what they were prior to the 30 per cent reduction. (2286) As to whether the Chesapeake & Ohio admit that there was about 35 per cent inflation, they admitted that 35 per cent inflation prior to the 30 per cent cut and the change in the rule.

By Mr. BRONSON:

As to whether for a continuous period of anything like a week, two weeks, or a month, the mines on the C. & O. could load their ratings, I know that the C. & O. could never handle the coal at the potential capacity of the mine. As to why it is "that the more cars the C. & O. loads, the greater the car shortage seems to be." I can not answer that question.

By Director BARTEL:

About 60 per cent of the mines on the Chesapeake & Ohio are non-union. As to whether at non-union mines the miners will work six

days a week and we will base rating on three days' performance loading railway cars, my answer is "No, I can not say as to that." I don't know anything about the operation of the mines. My business is to get the cars to the mines and get the cars after loaded to destination. (2287)

By Mr. BRONSON:

I judge that these percentage figures would vary according as the ratings vary.

3124 By Mr. GUTHEIM:

As to whether the Interstate Commerce Commission has formally approved the new rating rules on the Chesapeake & Ohio, I was lead to believe that by a statement made by Mr. Booth, that the commission had approved the rule that the Chesapeake & Ohio had adopted March 1. He was at that time in charge of transportation of the Chesapeake & Ohio.

S. C. HIGGINS (2288), recalled as a witness, testified further as follows:

Direct examination by Mr. GREEVER:

I speak for the New River Coal Operators' Association of West Virginia. I am secretary and traffic manager. The additional testimony that I wish to offer relates strictly to the peculiar conditions the New River district mines are placed in, as compared with the competitive situation. Our mines located in the New River field compete with mines in the various markets having and using private cars for the transportation of their commodities. (2289) Private cars have been placed at those mines in sufficient volume to insure full running time, as compared to a limited running time of the mines not served by the private cars and depending upon the carrier, the Chesapeake & Ohio Railroad, for system equipment. System equipment has been placed at the private car mines on days when there was a full amount of private cars available for loading, and at times when private cars were stored on the tracks of the carrier at Thurmond, W. Va., and the system cars so placed, five in
3125 number, were loaded to Washington, D. C., with commercial coal, and the cars were not counted against the distributive share of the mines at which the cars were placed until some three weeks later when their attention was directed to the fact that they were loading system cars without counting them in accordance with the rules under which they were placing cars at the mine. After this time elapsed the cars were charged. In the meantime the five system cars were placed at this particular private car mine for the express purpose of taking away markets from the mines which depended entirely upon system cars. Furthermore a great amount of the coal moving from these private car mines was in the past competitive coal (2290), which now is removed from that competition by reason of the inability to reach the markets. I have in mind the great bunker business of the West Indies. The mines depending upon system cars were gradually forced out of that bunker business,

with their quality of coal similar, and adaptable to the bunkerage business, with the result that practically the full amount of the West Indies bunker business is now controlled through the use of private cars from the Chesapeake & Ohio Railroad.

Cross-examination by Mr. BRONSON:

In effect this is a charge against the Chesapeake & Ohio of discrimination in that system cars were placed at the mines of the New River and Pocahontas Coal Company when there was not only a full quota of private cars available in the mines for protection of their loading but a surplus of cars on the tracks of the carrier at Thurmond. W. Va., which is contrary to the rules of the Chesapeake & Ohio. There has been no one on the C. & O. so far able to answer why that was done (2291), although a rather exhaustive investigation was conducted and the responsibility, to my knowledge, has never been fixed. That was about the middle of March.

3126 By Mr. GREEVER:

My information as to why it was done was that the cars were loaded for the purpose of destroying the markets of mines shipping coal to Washington, depending upon system cars of the C. & O.

By Mr. GUTHEIM:

There were just the five cars. They were test cars.

By Mr. BRONSON:

It only happened one day, and there was so much trouble raised about it that the practice was immediately discontinued. It is correct (2292) that on one day in March, 1923, the Chesapeake & Ohio placed five system cars at the New River and Pocahontas Company's mines, when Berwind had private cars of its own, which could have been used. Under the circumstances I can hardly imagine it was a mistake, because the Chesapeake & Ohio should know when they are placing system cars at a mine and when they are placing private cars at a mine. If they are carrying out the rules of the carrier according to the way that others are compelled to observe them, they should know what their car distribution is. That was about the 15th of March. (2293) I can not tell the exact date. As to who discovered it and stopped it, I was the one that took the necessary action with the Chesapeake & Ohio. I discovered it approximately two weeks after it happened. It did not continue simply because these were test cars going in for that particular business. The idea was that if they got away with this on that one day, perhaps a week or two later they would try it again. That is the usual practice.

By Mr. GREEVER: (2294)

I attribute the loss of the bunkerage business in the West Indies to the fact that somebody has private cars on the Chesapeake & Ohio Railway. As to who had bunkerage business in the West
3127 Indies, I am not prepared to give information as to the individual sales agencies, because it has been some time since bunkerage business has been enjoyed in the New River field, and I must of necessity give it from some one who actually enjoys that

business. I know that the same operator who ships coal from the New River district in private cars also ships coal to Hampton Roads from the Norfolk & Western mines in system cars. As to whether the coal from either railroad or the coal from both railroads goes to the West Indies, "there is." I don't know whether that operator has his own bunkering stations in the West Indies. (2295) I have never been in the West Indies. I would not say from direct observation whether there are any bunkering stations there. I have been advised that the tonnage of the West Indies bunkerage business is approximately 1,000,000 tons. The greater part of it comes from the smokeless fields. As to whether any of the West Indies bunkerage business is done with English or Welsh coal, I can not give the details of the West Indies bunkerage business. As to whether I know anybody in the New River field that has lost any bunkerage business in the West Indies (2296), there would practically be no market for West Indies business, if my understanding is correct, that the larger part of the bunkerage business is controlled by the Berwind-White interests in the West Indies. In other words, Berwind-White would not be buying somebody's else coal.

Mr. GUTHEIM. * * * I would like to offer, in conjunction with Mr. Rust's testimony and particularly his statement with respect to the growth of the by-product coking industry, a compilation from the published reports of the United States Geological Survey, which shows the total coke produced in the United States from 1880 to 1922, divided as between beehive and by-product.

3128 (The statement referred to was received in evidence as Exhibit No. R–52.) (2297)

Mr. BRONSON. Mr. Director, on October 29, Mr. Commissioner Aitchison requested that all roads using assigned cars report at once whether on days when assigned cars do not equal mines' pro rata share the mine is supplied with unassigned cars to make up the deficiency. I have caused to be prepared by the American Railway Association an exhibit which includes the answers from all the producing railroads.

(The paper referred to was received in evidence as Exhibit No. R–53.)

Mr. BRONSON. The respondents filed at the first hearing a statement [Exhibit 103] showing bituminous and lignite mines in the entire United States: (a) Condition of car supply; (b) percentage of full time worked; (c) actual production; and (d) reduced potential capacity by weeks, for calendar year 1922. We have collected the same information for the year 1923, and (2298) I would like to ask leave to file this complete exhibit, for both 1922 and 1923, as Exhibit No. 54.

(The statement referred to was received in evidence as Exhibit No. R–54.)

Mr. BRONSON. * * * The carriers also filed, as Exhibit No. 18, a statement showing private ownership of coal and coke cars brought up, as I recall it, to January, 1922. We have since amplified that,

to include October, 1923, and I would be glad to file that as Exhibit No. 55.

(The paper referred to was received in evidence as Exhibit No. R–55.)

Mr. BRONSON. The carriers have prepared a statement taken from third quarter, Railway Equipment Quarterly, showing privately owned cars as of August 1, 1923, which I would like to file as Exhibit No. 56.

3129–3130 (2299) (The paper referred to was received in evidence as Exhibit No. R–56.)

Mr. BRONSON. As I understand it, requests were made upon the Chesapeake & Ohio by Mr. Ernest Ballard for certain information, shown in the record at pages 19, 35, 56, 400, and 405. Part of that information has been furnished Mr. Ballard, with a copy to the commission. The balance is being gathered now, and will be furnished in a very few days. * * * I understand that it is the desire of the commission to have the C. & O. furnish certain information which Mr. Curry called for yesterday, from the Pennsylvania, the L. & N., and the C. & O. As I said before, we will undertake to induce the Pennsylvania to furnish the information. The L. & N. have agreed to do it, if it can be done, and I will take it up immediately tomorrow with our people, so far as the C. & O. is concerned. The Pennsylvania has just informed us that they will try to have it within ten days. So far as I know, Mr. Director, that is all we have. (2300)

Director BARTEL. Is that all anybody has? [No response.] * * * The hearing is closed.

3131 *Statement re 200 exhibits received in evidence in hearings before the commission in docket No. 12530*

Ex. 1 (Gutheim): Six-page document showing under heading "Exhibit A" rules for rating, for car distribution purposes, coal mines (other than anthracite) loading coal at mine tipples, and under the heading "Exhibit B" rules relating to rating and car distribution of other than tipple mines loading bituminous coal. The rules in Exhibit A are as follows, changes from the rules in C. S.–31, revised, being indicated by capitalizing words inserted and by drawing lines through words omitted:

3132 RULES FOR RATING FOR CAR DISTRIBUTION PURPOSES COAL MINES (OTHER THAN ANTHRACITE) LOADING COAL AT MINE TIPPLES.

The following rules shall govern the rating of coal mines (other than anthracite) as the basis for the distribution of empty cars to such mines:

(a) The daily capacity of each mine (other than mines covered by paragraphs b and c) shall be determined by taking the total coal tonnage shipped by the mine during the preceding month, dividing it by the number of hours worked in producing it (see paragraph e), and multiplying the quotient by the number of hours in the recog-

nized work day (not more than 10 hours) of the individual mine. The result shall be termed the "daily rating" of such mine and shall be the basis on which cars shall be distributed to it; PROVIDED, THAT IF TRACK OR OTHER LIMITING CONDITIONS FURTHER RESTRICT ITS ABILITY TO SHIP SUCH CONDITIONS MAY BE THE LIMITING FACTOR FOR THE DAILY RATING OF SUCH MINE.

(b) The daily capacity of a mine which is served jointly by or for two or more carriers (steam, electric, or water) shall be determined by taking the total tonnage shipped by the mine via all such carriers during the preceding month, dividing it by the number of hours worked in producing it (see paragraph e) and multiplying the quotient by the number of hours in the recognized workday (not more than 10 hours) of the individual mine. The result shall be termed the "gross daily rating" of such mine and shall be the basis on which cars shall be distributed to it; provided, that if track or other limiting conditions further restrict its ability to ship via (note a) ..... railroad, such conditions ~~shall~~ MAY be the limiting factor for the (note a) ..... railroad's daily rating of such mine.

(c) The daily capacity of a mine ~~delivering part of its output to a coking plant, to locomotives at the tipple, or to local trade~~ OF WHICH A PART OF THE OUTPUT IS, WITHOUT THE USE OF RAILROAD TRANSPORTATION, DELIVERED TO A COKING PLANT, TO LOCOMOTIVES AT THE TIPPLE, FOR LOCAL USE AT THE MINE, OR TO BE SOLD TO LOCAL TRADE, shall be determined by taking the total coal tonnage ~~shipped in railroad cars~~ PRODUCED during the preceding month, dividing it by the number of hours worked (see paragraph e) and multiplying the quotient by the number of hours in the recognized workday (not more than 10 hours) of the individual mine, AND DEDUCTING FROM THE RESULTING TONNAGE THE DAILY AVERAGE TONNAGE (COMPUTED BY USING THE NUMBER OF DAYS THE MINE WORKED) SO DELIVERED WITHOUT THE USE OF RAILROAD TRANSPORTATION DURING THE PREVIOUS MONTH. ~~The result~~ THE REMAINDER shall be termed the "daily rating" of such mine and shall be the basis on which cars shall be distributed to it.

(d) ~~When the fires are withdrawn from part (or all) of ovens at an operation coking part of its output, for the purpose of shipping coal production formerly used in charging ovens, the daily rating of the mine~~ WHEN A MINE, THE DAILY RATING OF WHICH HAS BEEN DETERMINED UNDER RULE (C), DISCONTINUES DELIVERY OF A PART OF ITS OUTPUT WITHOUT THE USE OF RAILROAD TRANSPORTATION AND OFFERS ADDITIONAL COAL FOR SHIPMENT, ITS DAILY RATING shall be increased to include the average tonnage per day (COMPUTED BY USING THE NUMBER OF DAYS THE MINE

WORKED) so diverted in the previous month until the beginning of the next rating period, at which time the daily rating of the
3133 mine shall be determined in accordance with paragraph a or c, due allowance being made for such average tonnage so diverted in so ~~computing~~ DETERMINING the new daily rating. THE DAILY RATING OF A MINE SHIPPING COAL WILL BE DECREASED IN LIKE MANNER WHENEVER ITS ENTIRE OR PARTIAL OUTPUT IS DIVERTED FOR COKING, FOR DELIVERY TO LOCOMOTIVES AT THE TIPPLE, FOR MINE USE, OR TO LOCAL TRADE, WITHOUT THE USE OF RAILROAD TRANSPORTATION. ~~A corresponding decrease of the mine's rating will be made when the ovens are again placed in blast.~~

~~When a mine that has been coking its entire output desires to ship coal and the fires are withdrawn from part (or all) of its ovens, it shall be given a daily rating for coal shipments corresponding to the average tonnage of coal formerly coked until the beginning of the next rating period, at which time the daily rating of the mines shall be determined in accordance with paragraph a or c.~~

(e) In determining the number of hours worked ~~in~~ each day IN PRODUCING COAL at a mine, time will be counted, (a) from the established time for beginning work (~~or the actual time if earlier or later than the established time~~) on the tipple until the dumping of coal finally ceases for the day, making deductions for the noon intermission when it is taken and for the time lost by reason of being blocked with loads, waiting for ~~additional~~ empty cars, or other railroad disability, ~~provided that if a greater number of hours is worked in the mine than on the tipple, the mine hours must be reported also, and the number of hours worked in the mine must then be used as the number of hours worked in producing the coal. (See paragraphs a, b, and c.~~ AND (b) FROM THE ESTABLISHED TIME FOR BEGINNING WORK IN THE MINE UNTIL THE PRODUCTION OF COAL WITHIN THE MINE FINALLY CEASES FOR THE DAY, MAKING DEDUCTION FOR THE NOON INTERMISSION WHEN IT IS TAKEN, THE NUMBER OF HOURS WORKED IN PRODUCING THE COAL (SEE PARAGRAPHS a, b, and c) WILL BE THE GREATER OF THE TWO COUNTS. Time may be deducted for railroad disability only when such railroad disability actually reduces the quantity of coal dumped that day. Time may be deducted when tipple is used for dumping coal DIRECT into locomotives only when the tipple can not be simultaneously operated for loading cars.

(f) Daily ratings determined in accordance herewith will be revised monthly and made effective on the 10th of the month following the month's performance on which the rating is determined.

(g) If a mine be idle for a period of one full calendar month or more, the last rating determined will be the rating when work is resumed, provided the mine conditions be substantially the same as when the mine closed.

(h) Rating for development purposes based on current performance will be assigned to a new operation in previously undeveloped coal. A new mine will be furnished with a supply of cars sufficient to enable it to work freely in the course of development for a period not exceeding 6 months after shipments are begun; provided, that if theretofore its ability to load 150 tons per shift (not, however, to exceed 2 shifts per day) is established, it shall then be rated. A new operation of any other character shall be entitled to a development rating for a period of one month after shipments are begun.

(i) Each mine shall report on a prescribed form to the ..... ----------(Note B)---------- promptly at the close of each day:

3134 1. The number of hours in the recognized work day.

2. The established time for beginning the days' work.

3. Actual time work was begun this day ~~on the tipple:~~

A. ON THE TIPPLE.....

B. IN THE MINE.....

4. If the noon hour intermission is taken, how long.

5. Time lost during the day ~~account:~~

~~Waiting for railroad cars or other railroad disability~~ ..... ~~hour.~~

~~Strikes or mine labor shortage.~~

~~Mine disability.~~

~~No Market.~~

~~All other causes:~~

A. BLOCKED WITH LOADS..... ....HOURS

B. WAITING FOR EMPTY CARS..... ....HOURS

C. OTHER RAILROAD DISABILITY, SPECIFIED..... ....HOURS

D. CAUSES OTHER THAN RAILROAD DISABILITY, Specified..... ....HOURS

6. Time work ~~on tipple~~ ceased for day.

A. ON THE TIPPLE.....

B. IN THE MINE.....

7. Number of hours worked to-day on the tipple ..... and in the mine ..... (see paragraph e).

8. Number of net tons of coal loaded for shipment via ..... (note a) ..... railroad.

9. Total number of net tons of coal produced and shipped via each other outlet, SPECIFIED, OR DISPOSED OF OTHERWISE.

Joint mines shall furnish this daily report to each carrier serving them.

If after notice from the railroad an operator persistently fails to furnish this daily report, he will be penalized by curtailment of his car supply to the amount of 25 per cent of distribution for one week.

(j) At the close of each month the mine manager or superintendent in charge of actual operation shall report under oath on a prescribed form to the ..... (note b) ..... having jurisdiction, separately for each mine for each month, as follows:

1. Number of hours in the recognized work day.
2. Total number of net tons of coal produced.
3. Total number of net tons of coal shipped via the ----------
(note a) ---------- railroad.
4. Total number of net tons of coal shipped via each other outlet.
5. Total number of hours worked during the month. (See paragraph e).

This report must be forwarded not later than the 3rd of the month following that for which the statement is furnished; provided, that where the location of the mine makes it inconvenient to furnish a report under oath by that date, a report not under oath may be forwarded, and the sworn report forwarded not later than one week after. Joint mines shall furnish this monthly report to each carrier serving them.

(k) If an operator declines or persistently fails to make reports or to make accurate reports to the carrier as required herein it will be assumed that the mine worked full hours in producing and loading into railroad cars the tonnage shipped, and the daily rating will be computed accordingly.

3135 (l) A statement showing the mine ratings which will govern the car distribution for the succeeding month will be furnished as soon as such ratings are ascertained to such coal mines on this railroad as make application for the same. Such statement will show the mine rating of each mine and the total mine ratings of each coal loading district and the aggregate ratings for all mines and all districts on this railroad, ~~and the percentage of each such figure to the total~~.

Note A.—Designate the name of issuing railroad.

Note B.—Designate title of proper officer of issuing railroad.

PREAMBLE

Whenever the available car supply in any region (or district) is such that all orders for cars can be filled, cars, shall be placed at each mine in accordance with its daily order, ~~except that whenever a mine holds unbilled coal loads, it shall be entitled only to empty cars equal in number to the difference between the rating last established for the mine and the number of unbilled coal loads so held~~ AND A MINE MAY HOLD SUCH CARS UNDER LOAD AND UNBILLED ON THE MINE TRACKS AND UP TO THE CAPACITY OF SUCH TRACKS BELOW THE TIPPLE. Whenever the available car supply IN ANY REGION OR DISTRICT ~~is~~ BECOMES such that all orders for cars cannot be filled, each mine shall be given its pro rata share of cars in accordance with the following rules, AND ALL UNBILLED LOADS THEN HELD ON THE MINE TRACKS MUST BE PROMPTLY BILLED, AND PENDING SUCH DISPOSITION WILL BE ACCOUNTED FOR UNDER RULE 7 HEREOF:

1. The daily rating, or the daily order for cars if less than the rating, shall be the basis for car distribution.

2. Grouping of mines, or pooling of cars as between mines, will not be permitted.

3. On application of mine operators, and in the discretion of the railroad, cars may be placed on such days only and at such mines only as may elect to work, and overs and shortages in car supply resulting from this distribution shall be adjusted on succeeding days.

4. Each mine operator shall report to the car distributor at ..... (Note 1) ..... p. m. daily:

(a) Number of unconsigned loads on hand at 7 a. m.

(b) Number of empty and partly loaded cars on hand at 7 a. m.

(c) Additional number of empty cars received during the day.

(d) Aggregate number of empty cars received during the day.

(e) Number of cars loaded during the day.

(f) Number of empty cars standing over at close of day.

(g) Number of empty cars standing over at close of day which were received prior to 7 a. m. ..... cars: and prior to 10 a. m. ..... cars.

(h) Number of partly loaded cars under tipple at close of day.

(i) Number of unconsigned loads on hand at close of day.

(j) Additional number of empty cars required for loading following day.

(k) Note 2.

Copies of orders for cars for a mine that is joint with any other carrier (steam, electric, or water) shall be filed with a designated representative of each such carrier. Such combined requisitions must not exceed the gross daily rating of the mine.

3136 5. The recognized standard car for coal car distribution is 50 tons. Others are compared thereto by tenths of a car; i. e., 80,000 pounds capacity equals (.8) of a car; 140,000 pounds capacity one and four-tenths (1.4) cars, etc., and cars must be charged and car distribution records maintained accordingly.

6. ~~(a) All cars placed at a mine during each period of 24 hours ending at 10 o'clock a. m. (or when Sundays or holidays intervene, the longer period ending at 10 o'clock a. m. of the day immediately succeeding the Sunday or holiday) shall be charged against the mine on the day when such period ends; provided, that if the cars placed at 7 o'clock a. m. (not including partly loaded cars) do not equal or exceed in number 25 per cent of the daily rating (or order if less than the rating) than no cars will be charged against the mine that day except such as are loaded on that day.~~

(b) ~~Cars placed between 10 o'clock a. m. and the time the mine ceases work for the day, if loaded or partly loaded on the day placed, will be charged against the mine on that day.~~

(c) ~~All cars of other than railroad ownership (commonly called "private" cars) placed for owners loading will be considered as ordered.~~

6. (a) WHEN THE CARS PLACED AT 7 O'CLOCK A. M. (NOT INCLUDING PARTLY LOADED CARS) DO NOT EQUAL OR EXCEED IN NUMBER 25 PER CENT OF THE DAILY

RATING (OR ORDER IF LESS THAN THE RATING) NO CARS WILL BE CHARGED AGAINST THE MINE THAT DAY EXCEPT SUCH AS ARE LOADED ON THAT DAY.

(b) WHEN THE CARS PLACED AT 7 O'CLOCK A. M. (NOT INCLUDING PARTLY LOADED CARS) EQUAL OR EXCEED IN NUMBER 25 PER CENT OF THE DAILY RATING (OR ORDER IF LESS THAN THE RATING) ALL ADDITIONAL EMPTY CARS PLACED BY 10 O'CLOCK A. M. WILL BE CHARGED AGAINST THE MINE THAT DAY.

(c) CARS PLACED BETWEEN 10 O'CLOCK A. M. AND THE TIME THE MINE CEASES WORK FOR THE DAY, IF LOADED OR PARTLY LOADED ON THE DAY PLACED, WILL BE CHARGED AGAINST THE MINE ON THAT DAY.

(d) ALL CARS OF OTHER THAN RAILROAD OWNERSHIP (COMMONLY CALLED "PRIVATE CARS") PLACED FOR OWNERS LOADING WILL BE CONSIDERED AS ORDERED.

7. The pro rata share of cars to which each mine is entitled, except as provided in rule 9, shall be based on its rating (or order when less than its rating). When a mine has empty or partly loaded cars which were placed prior to 7 a. m. or unconsigned loads standing over at the close of the day's business, such cars shall be charged against it each service day thereafter while they are detained, except as otherwise provided in rule 6.

If on any day a mine be furnished with cars totaling less than 100 per cent of its rating (or order if less than its rating) and for any cause whatever other than railroad responsibility fails to load the entire number, the mine shall be considered as having been furnished 100 per cent of its requirements, and its order shall be arbitrarily reduced to the number of cars furnished.

8. Private cars, ~~and~~ such cars as are assigned to mines ~~by the Car Service Section, United States Railroad Administration,~~ FOR RAILROAD FUEL LOADING IN ACCORDANCE WITH THE DECISIONS OF THE INTERSTATE COMMERCE COMMISSION IN *R. R. COMMISSION OF OHIO, ET AL., V. H. V. RY. CO., 12 I. C. C. 398, AND TRAER V. CHICAGO & ALTON RAILROAD CO. ET AL., 13 I. C. C. 451*, AND CARS ASSIGNED TO MINES FOR LOADING OF OTHER COAL UPON ORDER OF THE INTERSTATE COMMERCE COMMISSION, will be designated as "assigned" cars. All other cars will be designated as "unassigned" cars.

3137 9. If the number of assigned cars placed at a mine during any period, as provided in rule ~~6~~ 8, equals or exceeds the mine's pro rata share of the available car supply, it shall not be entitled to any unassigned cars. The assigned cars, together with the mine's requirements, will be eliminated, and the remainder of the available car supply pro rated to the other mines, based on a revised percentage by reason of such elimination.

10. If the number of assigned cars placed at a mine during any period, as provided in rule ~~6~~ 8, is less than its pro rata share, based

on a revised percentage, it shall be entitled to receive unassigned cars in addition thereto to make up its pro rata share.

11. If a mine receives more or less cars than it is entitled to during any period, as provided in rule 6 (and after eliminating assigned cars as provided in rule 9), it will be charged with a surplus or credited with a shortage accordingly, and the discrepancy adjusted as promptly as practicable.

12. A statement showing the car distribution for the preceding month will be furnished as soon as such distribution is ascertained, to such coal mines on this railroad as make application for the same. Such statement will show the car distribution of each mine, the total car distribution of each coal-loading district, the aggregate distribution for all mines and all districts on this railroad, ~~and the percentage of each such figure to the total.~~

Note 1.—Hour may be named by the issuing railroad.

Note 2.—Issuing railroad may ask additional necessary information pertaining to car supply.

3138 Ex. 2 (Gutheim): 4-page document containing car rating and distribution rules of United States Railroad Administration, division of operation, car service section, dated Sept. 12, 1918, and issued as circular C. S.–31. Rules 6, 7, 8, and 9 relating to assigned cars are practically identical with rules 8, 9, 10, and 11 of C. S.–31, revised.

Ex. 3 (Gutheim): 4-page document containing car rating and distribution rules of United States Railroad Administration, division of operation, car service section, dated Dec. 23, 1919, and issued as circular C. S.–31, revised. The rules in this circular are indicated in Exhibit 1.

Ex. 4 (Gutheim): 1-page Penna. System form of daily report of mine rating information.

Ex. 5 (Gutheim): 1-page B. & O. form of daily report of unassigned and assigned open cars placed, and other information relating to car distribution.

Ex. 6 (Gutheim): 1-page Penna. System form of monthly sworn statement by each mine of information for use in rating the mine.

Ex. 7 (Gutheim): 1-page B. & O. R. R. form of sworn monthly statement by each mine of information for use in rating the mine.

Ex. 8 (Gutheim): 1-page copy of commission's service order No. 14, dated Aug. 25, 1920, declaring an emergncy to exist and prescribing the rule to be followed in distributing cars to wagon mines.

Ex. 9 (Gutheim): 1-page copy of commission's service order No. 17, dated Sept. 16, 1920, superseding service order No. 14, and prescribing the rule to be applied in the distribution of open top cars to wagon mines.

3139 Ex. 10 (Gutheim): 1-page copy of amendment to service order No. 17 dated March 3, 1921, vacating at midnight March 6, 1921, service order No. 17.

Ex. 11 (Gutheim): 1-page Penna. System form for recording information concerning distribution of cars for coal at mines, separate columns being provided for assigned cars and unassigned cars.

Ex. 12 (Gutheim): 1-page B. & O. R. R. form for recording information as to distribution of cars for coal loading to Pittsburgh Division mines for 24 hours ending 6 p. m., separate columns being provided for assigned cars and unassigned cars.

Ex. 13 (Gutheim): 2-page statement showing private ownership of coal and coke cars and the companies owning them in January of each year 1916 to 1922, incl., and on March 1, 1922. 149 companies are listed and the totals are: 1916, 14,789 cars; 1917, 14,879 cars; 1918, 16,933 cars; 1919, 20,481 cars; 1920, 18,955 cars; 1921, 28,411 cars; 1922, 27,827 cars; March 1, 1922, 26,483. (See Exhibit R–55 extending this statement to cover January and October, 1923.)

Ex. 14 (Gutheim): 1-page statement by weeks showing for N. Y. C. and B. R. & P. percentage of shortage of cars for bituminous coal loading at mines on each line for years 1917 to 1920, inclusive.

Ex. 15 (Gutheim): 1-page statement showing ownership and capacity of open top cars of Norfolk Southern R. R. and Seaboard Air Line Ry., Jan. 1, 1919, 1920, and 1921; locomotive fuel consumption, 1919, 1920, and 1921; and origins of locomotive fuel together with weighted average length of haul during same period.

Ex. 16 (Gutheim): 2-page statement based on reports made July 1921, showing bituminous coal mines owned or leased by common carrier railroads, including name of railroad, location of mine, total production, and production sold commercially.

3140 Ex. 17 (Gutheim): 1-page statement showing the extent to which uniform mine rating and coal car distribution rules carried in car service division circular C. S.–31, revised, were effective on bituminous coal loading railroads during the years 1920 and 1921 and up to July 22, 1922; also the extent to which other rules governing coal car distribution to mines were in effect contemporaneously.

Ex. 18 (Gutheim): 2-page statement showing extent to which assigned cars have been used by Class I railroads to protect railroad fuel coal loading during the coal car shortage periods in 1920 and in 1922 up to July 22.

Ex. 19 (Markham): 64-page pamphlet entitled "Illinois Miners' Earnings, 1920–1921," and being shown as "An official accumulation, tabulation, and detailed presentation of actual annual incomes, together with a study of the factors of labor—turn-over, absenteeism, amounts paid through the 'Check-off' to the United Mine Workers organization, and other data having a direct bearing on the present Illinois mine labor situation," compiled and issued jointly by Illinois Coal Operators Association, Coal Operators Association of the 5th and 9th districts, and Central Illinois Coal Operators Association.

Ex. 20 (Curry): 1-page copy of letter from purchasing agent, Illinois Central Railroad Company, to Hercules Coal Company, Morganfield, Ky., accepting entire output, about 200 tons per day,

of the Morganfield, Ky., mine for company use at $3.50 per ton for run of mine coal subject to changes in wage scale, and stating mine would receive full car supply each working day.

3141 Ex. 21 (Alfred): 1-page statement showing as to Short Creek Mine No. 1, Adena, Ohio, for last 7 months of 1920, the rating of the mine, tonnage taken care of for P. M. Ry. in assigned cars, per cent of such tonnage to rating, and tonnage the mine would have taken care of on unassigned car percentage. Statement shows that without assigned cars mine would have received 70.9 per cent of rating and with assigned cars it actually received 95.77, a difference of 56,503.57 tons.

Ex. 22 (Pearson): 1-page statement of company coal received by the New York, New Haven, and Hartford R. R. Co., January, 1920, to October 31, 1922, by months, all rail and tidewater; also total tons on hand in piles and bins combined.

Ex. 23 (Pearson): 1-page statement showing as to N. Y., N. H. & H. R. R. Co. bituminous coal purchased, by tons, by value, and f. o. b. mine prices, for the years 1919 to 1922, inclusive.

Ex. 24 (Galloway): 15-sheets containing 11 statements concerning coal cars, mine rating, and car distribution to mines on the B. & O. R. R. Statement No. 1 shows for first 10 months of 1922 B. & O. coal cars owned, B. & O. serviceable coal cars on line, foreign coal cars on line, private coal cars on line, and private car per cent of the total serviceable cars, i. e., B. & O., foreign and private cars. This per cent varied from 1.213 per cent (or 580 cars) in May, 1922, to 2.556 per cent (or 1,182 cars) in October, 1922. Statement No. 1a shows as of Oct. 16 each year, 1916 to 1921, incl., B. & O. coal cars owned, B. & O. coal cars on its line, foreign coal cars on its line, private coal cars on its line, and private car per cent of the total. This per cent varies from a minimum of 1.34 in Oct., 1918, to a maximum of 3.55 in Oct., 1916. Statement No. 2 shows by divisions the number of tipple coal mines on B. & O. R. R., including by-lines in local distribution, Oct. 10 each year, 1916 to 1922, inclusive. Totals are as follows: 1916,

3142 mines, 541, daily rating in 50-ton cars, 3,902; 1917, mines 677, rating, 4,393; 1918, mines, 860, rating, 3,827; 1919, mines, 912, rating, 4,551; 1920, mines, 972, rating, 5,518; 1921, mines, 1,087, rating, 6,146; 1922, mines, 1,130, rating, 6,987. Monongah division is shown to have 262 mines in 1922. Statement No. 3 shows coal production on B. & O. R. R. for commercial use and for company use by years, 1918 to 1922, inclusive. Statement No. 4 shows for each year 1918 to 1922, inclusive, B. & O. coal for company use and per cent thereof not loaded in cars. Statement No. 5 shows as of Nov. 9, 1922, same information shown in statement No. 1a for Oct. 10, 1916, to 1922, inclusive, the total number of mines on November 9, 1922, being 1,143 and total rating in 50-ton cars, 6,986.5. Statement No. 6 shows for week ending Nov. 4, 1922, 2,197 B. & O. fuel cars, 2,130 foreign fuel cars, and 997 private cars, 13,744 commercial cars (including private and foreign railway fuel), and per cent B. & O.

fuel cars to total cars, i. e. 13.78. Statement No. 7 shows percentage of car supply available at mines exclusive of assigned B. & O. fuel cars on Oct. 9, 1922, and what it would be if such cars were classed as unassigned. "Percentage of unassigned as at present" is 62.21 and "Car supply with B. & O. R. R. fuel cars added" is 65.44. On Oct. 16, 1922, these percentages were respectively 46 and 49.83; Oct. 23, 52.56 and 56.53; Oct. 24, 37.86 and 42.46. Statement No. 8 shows, by B. & O. divisions, mines which loaded their output for foreign-railway fuel for which B. & O. receives an equivalent number of empties. N. Y., N. H. & H. is shown to supply approximately 122 cars daily for loading at 9 mines on the Monongah Division and 12 cars from a mine on another division; C. R. R. of N. J., 51 cars for 6 mines on the Monongah Division; P. & R., 79 cars for 7 mines on the Monongah Division, and 24 cars on 2 other divisions; N. Y. C., 35 cars for one mine on Monongah Division; N. Y. C. & St. L., 36 cars for 2 mines on the Wheeling Division; Erie, 19 cars for one mine on Pittsburgh Division and one mine on Wheeling Division; Grand Trunk, 41 cars for one mine (Rail & River No. 6) on Wheeling Division; Pere Marquette, 27 cars from 3 mines, one being on Monongah Division; Big Four, 12 cars from 1 mine on Wheel-
3143 ing Division; Mich. Central, 15 cars from one mine on Wheeling Division; D. & T. S. L., 3 cars from one mine on Monongah Division; and Bangor & Aroos., 10 cars from one mine on Monongah Division; the total cars daily being 486. Statement No. 9 shows, under the heading "Existing fuel coal contracts No. 13, 1922," 12 coal-car distribution divisions, 56 mines, 44 operators, and total estimated daily tonnage of 23,438. 18 mines are shown on the Monongah with estimated daily tonnage of 7,455. Statement No. 10 shows nonpercentage and percentage periods of coal-car distribution, Jan. 1, 1911, to Sept. 20, 1922, incl., the percentage periods being Sept. 1, 1911, to March 31, 1912; Sept. 1, 1912, to March 31, 1913; Sept. 1, 1913, to Jan. 14, 1914; March 9, 1914, to March 31, 1914; Sept. 22, 1915, to June 7, 1916; Aug. 15, 1916, to Feb. 20, 1919 ("war period"); Aug. 1, 1919, to Jan. 8, 1921 ("postwar period—miners' strike—outlaw R. R. strike").

Ex. 25 (Galloway): 2-page copy of coal contract dated Oct. 14, 1920, between B. & O. and M. A. Hanna & Co. Contract provides that railroad shall take entire production of Forsythe Coal Company's mine at $3.50 per net ton f. o. b. mine, and that "the said contract price is predicated upon a car supply of 100 per cent, which the buyer guarantees to provide, except as it may be prevented by law from assigning cars for the purpose of securing this fuel" and that "in this event the seller shall have the right to cancel the contract."

Ex. 26 (Galloway): 2-page copy of contract dated May 17, 1920, between Akron Coal Company and B. & O. R. R. Company. Contract provides that B. & O. has purchased entire output of Kings Mine near Lore City, Ohio, until March 31, 1921, the present output being approximately 900 tons per working day and the tonnage

furnished to vary between 700 and 1,100 tons per day. The buyer agrees to take at least a month's average of 700 tons per working day and to furnish cars sufficient to load at least that amount. Contract also provides for price of $3.10 per net ton if more than 17,500 and not more than 20,000 tons per month are furnished, and for
3144 the price of $3.20 if buyer does not furnish cars sufficient to load an average of at least 17,500 tons per month.

Ex. 27 (Galloway): 1-page copy of letter from M. A. Hanna & Co. to fuel agent, B. & O. R. R., confirming arrangement for sale of fuel coal to the railroad as outlined in B. & O. letter of Sept. 9th, and containing the following statements: "It was also understood that in connection with the price of $3.25, which provided for a full operation, that in the event you are unable to furnish cars for full operation of the mine, the price will be based on the cost of operation plus 50¢ per ton profit, the latter alternative not to exceed a total maximum price of $3.50 per ton, f. o. b. railroad cars at the mines. It is our understanding from Mr. Galloway that this is the same general contract that was entered into by other operators in the No. 8 district."

Ex. 28 (Rixey): Blue print showing map of Southern Railway system and sheet attached with legend showing the normal source and points of consumption of locomotive fuel of the system and approximate annual purchases for the year ending June 30, 1923, in the various fields (7 in number) based on the maximum monthly contract tonnages.

Ex. 29 (Callahan): 1-page statement showing list of commodities that can be, and are, handled in open-top, flat-bottom cars.

Ex. 30 (Callahan): 2-page copy of letter dated Oct. 11, 1920, from Edgar E. Clark, chairman, to Daniel Willard, chairman, advisory committee, Association of Railroad Executives, relating to assigned cars for railway fuel under Service Order 18.

Ex. 31 (Callahan): 3-page copy of rules of Colorado Southern Ry. Co., dated July 20, 1912, as to distribution of cars for the transportation of coal. Rule 9 reads as follows: "The distribu-
3145 tion of cars for transportation of coal during a period of car shortage shall be upon a basis which shall give all mines an opportunity to work approximately the same number of hours. Inequalities occurring in one calendar week shall be adjusted within the following calendar week." Rule 10 reads: "Cars, both foreign and system, assigned for loading railroad fuel, must be placed at mines where such fuel is to be loaded, regardless of the rating or the number of hours operated; the hours worked shall be charged against such mine and inequalities equalized in the distribution of cars for loading commercial coal as provided in rule 9."

3146 Ex. 32 (Callahan): 1-page graphic chart showing car shortage and car surplus from January 1, 1907, to July 1, 1921, inclusive, the chart having been prepared from data of the American Railroad Association. To and including March, 1918, the data shown is for all cars. Beginning April, 1918, the data shown is first for

all cars and second for coal cars. Chart shows, as to all cars, a shortage for nine months in 1907, for part of a month in 1909, for about four months in 1912, for part of a month in 1913, for a month in the first half of 1916 and for the last six months of that year, for all of 1917 except part of August, for the first four months of 1918, for three and one-half months in the latter part of 1919, and for all of 1920. It shows, as to coal cars, a shortage for about a month in the summer of 1918, for October 1919, and for eleven and one-half months of 1920. The highest peaks of car surplus of all cars were March 1, 1919, and May 1, 1921. For the period shown the peaks of coal car surplus were likewise about March, 1919, and May, 1921.

Ex. 33 (Callahan): 3-page statement showing cars available for loading by typical assigned car mines as compared with cars available for loading by typical competing commercial mines during 1920 on the Pennsylvania, Illinois Central, Western Maryland, B. & O., C. & O., T. & O. C., Z. & W., and L. & N. The per cent of cars available for loading to rating, or order where less, is in each case shown to be substantially greater at the assigned car mine than the competing commercial mine.

3147 Ex. 34 (Callahan): 3-page statement showing, for the same mines and railroads covered by Ex. 33, the cars available for loading, per cent of cars loaded to cars available, and cars available for loading but not loaded. Statement shows that of the 60 assigned mines and 60 unassigned mines, 46 assigned mines had 2,829 cars left over, that 40 commercial mines had 878 cars left over, that 13 commercial mines had no cars left over, and that 8 assigned mines had no cars left over.

Ex. 35 (Callahan): 3-page statement showing number of hours of working time at typical competing commercial and assigned car mines on the Pennsylvania, Western Maryland, B. & O., C. & O., L. & N., Illinois Central, Southern R. R., T. & O. C., and E. & I. in various months of 1920, the number of hours worked at the assigned mines being in each case substantially more than the hours worked at the unassigned mines.

Ex. 36 (Callahan): 1-page statement showing cars required, cars placed, and per cent of requirements placed by weeks for the period from week ended September 2 to week ended November 4, 1922, at mines on C., B. & Q. R. R. Statement shows 100 per cent the first week, 73 per cent the second week, and from 55 to 67 per cent during the remainder of the period. Cars required for the first week were 8,151, for the second week 7,476, and for the third week 11,235. The number gradually increased to approximately 14,000 in each of the last two weeks of the period.

Ex. 37 (Reed): 3-page blank forms for recording data concerning cost of mine operation. First two pages are entitled "Report of cost, income and tonnage for month of ——"; 55 items of expense are shown. The letter "n" by an item indicates it is not affected by idle time; "r," that it is reduced by idle time; "e," that it is

eliminated by idle time; and "x," that if depreciation is calculated on a percentage basis the amount is not affected, but if calculated on the basis of depletion or exhaustion of mineral the amount
3148 is lessened. The third page is a suggested form for distribution of mine labor in conformity with report of cost accounting committee of the National Coal Association, the letters "n," "e," and "r" being used to explain items shown.

Ex. 38 (Reed): 1-page graphic chart entitled "United States Fuel Administration, increase in total cost of production due to decrease in car supply, monthly percentages from the records of 73 oper.—New River Dist., W. Va., producing 7,231,343 tons in 1917."

Ex. 39 (Reed): 1-page extract from report of engineers' committee, United States Fuel Administration 1918–1919 as to "effect of short time." This statement explains chart shown in Ex. 38.

Ex. 40 (Reed): 1-page colored chart entitled "How lack of railroad transportation increases coal cost, data from United States Fuel Administration."

Ex. 41 (Brackett): 1-page graphic chart containing sketch of three kinds of mine openings; i. e., (1) drift mine opening, (2) slope mine opening, and (3) shaft mine opening.

Ex. 42 (Brackett): 1-page sketch illustrating advancing headings and retreating pillar work in a room and pillar mine.

Ex. 43 (Brackett): 1-page sketch illustrating method of drawing pillars in room and pillar mine.

Ex. 44 (Brackett): 1-page statement showing comparative advancement of headings at Lewis mine under short and full car supply, the short car supply being in February, 1920, and the full car supply in January, 1921.

Ex. 45 (Brackett): 1-page statement showing composite cost of production for 13 companies in northern West Virginia in 1920 and 1921, and illustrating variations in cost due to car supply.

Ex. 46 (Brackett): 1-page statement showing percentage of total cars loaded to rating on the Monongah division of the B. & O. by weekly periods in October, 1922, together with summary of cars.

3149 Ex. 47 (Tucker): 1-page cost sheet of Rockport mine No. 1, Rockport Coal Company, Rockport, Ky., for June and September, 1922.

Ex. 48 (Tucker): 2-page statement showing left-over cars at Echols mine and Rockport No. 1 mine for July, 1920.

Ex. 49 (Vogtle): 2-page copy of contract, dated June 19, 1922, between the Southern Railway Company and the Corona Coal Company. The contract provides for a minimum of 1,500 tons per month and a maximum of 2,500 tons per month from three mines in Alabama during the period from July 1, 1922, to June 30, 1923, at $1.90 per net ton. Contract also provides that "seller agrees to make full shipment each day to the extent of car supply before any other shipments are made."

Ex. 50 (Vogtle): 1-page statement showing July, 1922, fuel distribution order of Southern Railway for Birmingham division and north Alabama mines, the names of the various mines shipping fuel, the destination points, and tonnage due daily and monthly being shown.

Ex. 51 (Vogtle): 1-page recapitulation of July 1, 1922, fuel order of Southern Railway, with daily rating as of September 10, 1922, the names of the mines, the contract tonnage, both monthly and daily, and the daily rating as of September 10 being shown.

Ex. 52 (Ballard): 6-page composite statement showing as to all of the bituminous coal railroads and other important railroads of the United States, (a) those upon which coal mines are located, indicating those which own, control, or operate their own mines, the total production of such mines, and whether or not engaged in the sale of commercial coal; (b) those upon which no mines are located but which own, control, or operate coal mines located on other railroads; the total production of such mines, and whether or not engaged in the sale of commercial coal, and (c) important railroads upon which no mines are located and which own, control, or operate no coal mines located on other railroads but secure their fuel from mines on other railroads. Statement also shows total number of tons of fuel coal consumed, manner in which procured, and
3150 whether or not by the use of assigned cars. The statement is shown to be compiled by the National Coal Association from Exs. Nos. 16 and 18 (Gutheim), from Docket No. 12086, Increased Cost of Railroad Fuel, 1920 (61 I. C. C. 761), and from United States Geological Survey's "Coal in 1918."

Ex. 53 (Cowan): 2-page statement on letterhead of local Union, No. 935, United Mine Workers of America, showing for the C. A. Hughes & Company's Hughes No. 2 mine certain tonnage figures under the heading "Loaded" and under the heading "Able to load" for the period September 15 to November 12.

Ex. 54 (Cowan): 12 pages of correspondence and tabulations relating to cars received, cars loaded, hours worked, and number of employes of various mines in Pennsylvania.

Ex. 55 (Freeman): 1-page statement showing operation of Glen Ayr Coal Company mine during calendar year 1920. The statement is itemized by months as to tons produced, average cost per ton, classification of miners and number of days worked, hours lost on account of car shortage, labor trouble, and mine disability.

Ex. 56 (Courtney): 1-page statement showing for eleven mines in period from October 1 to November 11, inclusive, total cars placed, total cars if 100 per cent placement, and actual per cent of rating received.

Ex. 57 (Courtney): 1-page statement showing for Galloway No. 2 mine and Galloway No. 3 mine of the Simpson Creek Coal Company by weekly periods, October 1 to November 11, rating, cars available, cars loaded, and cars left over.

Ex. 58 (Courtney): 1-page statement showing for Monongah division, October 1 to November 11, inclusive, by days, cars loade rating, and cars left over. Also per cent of cars loaded to rating f the entire period.

Ex. 59 (McKinney): 6-page statement concerning coal-car supp on the T. & O. C. Ry. and the Z. & W. Ry. for the year 1920 sep
rately as to assigned and unassigned cars and also data sho
3151 ing effect of short working time on cost of production. Sh
1 is a chart showing separately for the T. & O. C. Ry., Corni district, and for the Z. & W. Ry., Fultonham district, comparati car supply for each month, 1920, at assigned car mines and comm cial mines. Sheet 2 is a tabulation for the same months, showi coal car supply of the T. & C., Corning district, separately as assigned car and unassigned car mines. Sheet 3 is a similar tabul tion, for the same period, of coal car supply of the Z. & W. R Fultonham district. Sheet 4 is a statement based on Exs. 38 and and showing effect of short working time on cost of producti predicated on report of engineers' committee, United States Fu Administration, 1918–1919. Sheets 5 and 6 show effect of worki time on the cost of producing coal, application of cost figures bei made to show average full time cost with assigned cars and with no assigned cars on the T. & O. C. Ry. and Z. & W. Ry.

Ex. 60 (McKinney): 1-page statement showing summary of c ordered, placed, and loaded on the Toledo & Ohio Central by wee from September 30, 1922, to November 11, 1922, railroad fuel ca both company and foreign, being shown separately. Stateme shows estimated cost per ton full working time to be $2.94 based chart of the United States Fuel Administration engineers. Fr this basis railroad fuel with full working time is shown to c $2.94 per ton and commercial coal with 29 per cent of normal worki time is shown to cost $5.14 per ton, the cost increasing 75 per c on 29 per cent working time.

Ex. 61 (Jones): 1-page statement showing fuel coal consum by a portion (26) of class 1 carriers without the use of assigned c during 1920, the total being shown as 171,920,941 tons. The sta ment is based upon Ex. 18 with respect to the use of assigned c and on records of the commission with respect to the tonna consumed.

3152 Ex. 62 (Jones): 1-page statement showing for the last months of 1920 and for January, 1921, data as to car distri tion taken from Pennsylvania Railroad bulletins by the Cent Pennsylvania Coal Producers Association. The statement sho separately for the eastern region and central region, total cars quired, total cars available, assigned and unassigned, per c assigned and unassigned, commercial distribution percentage, a percentage distribution of all cars. In the eastern region it shown that the commercial distribution percentage for the ten mon of 1920 was 50.7 and the percentage distribution including all c was 66.1. In the central region it is shown that the commercial

tribution percentage for the same ten months was 50.2 and the percentage distribution with all cars included 69.8. The per cent of assigned cars available to total cars (assigned and unassigned) available varied from 4.3 in March to 47.6 in August in the eastern region and from 19 in March to 58.9 in August in the central region.

Ex. 63 (Jones): 1-page statement showing average daily output for 1920 of the Pennsylvania Coal and Coke Corporation and of the United States. Based upon the actual performance of the Pennsylvania Coal and Coke Corporation, statement shows that combined maximum output for one year of 300 days, based on the highest day's performance for each colliery in the United States, would be 1,053,000,000 tons as contrasted with actual output for 1920 of 556,000,000 tons.

Ex. 64 (Jones): 4-page statement showing names of companies owning private hopper gondola cars and the number of such cars owned from 1902 to 1921, based on June equipment register each year. The total number of companeis and the total number of cars each year are shown respectively as follows: 24, 12,535, 1902; 29, 14,924, 1903; 33, 16,773, 1904; 35, 18,478, 1905; 34, 23,848, 1906; 37, 30,279, 1907; 35, 25,189, 1908; 32, 23,880, 1909; 25, 19,286, 1910; 24, 17,736, 1911; 23, 16,727, 1912; 24, 17,174, 1913; 24, 16,571, 1914; 19, 15,212, 1915; 16, 14,665, 1916; 21, 15,137, 1917; 28, 19,157, 1918; 32, 19,187, 1919; 38, 18,958, 1920; 64, 26,007, 1921.

Ex. 65 (Jones): 1-page statement based upon information
3153 from department of mines of State of Pennsylvania showing number of days worked during year 1920 by certain mining companies owning coal cars and by the Logan Coal Company using assigned system cars for railroad fuel, also the average days worked by these companies and the average days worked by all bituminous companies in the State. The substance of this exhibit is shown in tabulation printed in commission's report 80 I. C. C. page 559.

Ex. 66 (Jones): 1-page statement based upon bulletins of the Pennsylvania Railroad from March to December, 1920, showing in respect to certain mines of Penn-Mary Coal Company, Berwind-White Coal Mining Company, Union Coal & Coke Company, Cambria Steel Company and Logan Coal Company total cars required, total cars available, assigned and unassigned cars loaded, per cent of cars available to cars loaded, per cent of cars loaded to cars required, per cent of cars available to cars required, per cent of commercial distribution. The Logan Coal Company mines are shown to have had 75.9 per cent cars available to cars required and the other mines named over 100 per cent. The percentage commercial distribution was 50.7 in the eastern region including the mines of the Penn-Mary Coal Company and 50.2 in the central region, including the other mines of the companies named.

Ex. 67 (Jones): 1-page statement showing car distribution on Conemaugh Division of Pennsylvania Railroad last ten months 1920. Statement shows separately by months total cars required, total cars

available, both assigned and unassigned, cars loaded and ca
entitled to.

Ex. 68 (Jones): 1-page statement compiled from daily car record
of Pennsylvania Railroad showing from October 19 to November 1
daily per cent of commercial car distribution on the Eastern Regio
and South Fork and Pittsburgh-East End Districts of the Pennsyl
vania Railroad. The average daily per cent of distribution for th
Pittsburgh division, east end, is shown to be 23.82; for Pitts
burgh division, South Fork, 28.16; for Cresson division,
3154 Bellwood branch, 46.76; for Cresson division, Cresson and
Irvona, 47.06; for Cresson division, Cherrytree, 42.71; for
Tyron division, 33.24.

Ex. 69 (Huber): Withdrawn to be copied and not replaced.

Ex. 70 (Huber): 1-page copy of letter from C. M. Sheaffer, chief
of transportation, Pennsylvania System, to W. C. Huber & Company
with respect to distribution of cars to the mines of the coal company

Ex. 71 (Ballard): 1-page copy of questions in response to which
data contained in Exs. 33, 34, and 35 were submitted.

Ex. 72 (Willett): 1-page statement compiled from reports of the
United States Geological Survey showing yearly production o
bituminous coal in net tons from 1900 to 1921, inclusive, the produc
tion for the last year being estimated. The production in 1900 wa
212,316,112 tons. The 300,000,000 mark was reached in 1905 with
production of 315,062,785 tons; 400,000,000 was reached in 1910 an
500,000,000 in 1916. The maximum production was shown to b
579,385,820 in 1918; next highest, 563,734,383 in 1920. The produc
tion for 1919 was shown to be approximately 465,860,058 and th
estimated production for 1921, 415,922,000.

Ex. 73 (Willett): 1-page statement showing average yearly pro
duction of bituminous coal by five-year periods, 1821 to 1920, in ne
tons, the figures being taken from reports of the United State
Geological Survey.

Ex. 74 (Willett): 1-page statement showing estimated capacity o
bituminous coal mines in the United States by States, computed
from actual production, and days worked as reported by the United
States Geological Survey for 1920. The three States shown as hav
ing the largest production and also largest estimated capacity ar
Illinois with 88,631,000 actual production and 126,494,000 estimated
capacity; West Virginia, 89,451,000 actual production and 137,
343,000 estimated capacity; and Pennsylvania, 168,084,00
3155 actual production and 209,416,000 estimated capacity. A not
shows that the estimated capacity was obtained by dividing
304 (the full number of working days in a year) by the days actually
worked and then applying the factor so computed to the tonnage
actually produced. The statement shows 30 States and Alaska with
actual production of 563,734,000 tons, average number of day
worked 220 and estimated capacity 786,227,000.

Ex. 75 (Willett): 1-page statement showing for year 1921 same information shown in Ex. 74 for year 1920, the total production being 415,922,000, average number of days worked 149, and estimated capacity in net tons 848,593,000.

Ex. 76 (Willett): 1-page statement showing soft coal consumed in the United States and exported in a year of active business, by classes of industry. The figures are for the year 1917 except that the exports are the preliminary figures for 1921 and that the proportions between beehive and by-product coke are those which obtained in 1920. The table was taken from an article by F. G. Tryon and W. F. McKenney, of the United States Geological Survey, published in Coal Age, January 20, 1922, page 85. The total production is shown to be 554,200,000. Of this the railroads are shown to take 27.7 per cent; steel plants, 6.4 per cent; beehive coke, 6.5 per cent; by-product coke, 8.7 per cent; public utilities (electric), 5.7 per cent; public utilities (coal gas, excluding coal consumed in by-product coke ovens supplying gas for city use), .9 per cent; domestic consumers, 10.3 per cent; coal-mine fuel, 2.2 per cent; exports, Canada and Mexico, 4.7 per cent; bunkers (foreign, coastwise, and lake trade), 1.8 per cent.

Ex. 77 (Bronson): 1-page statement showing comparison of unassigned percentage of car supply with system fuel assigned and unassigned percentage of car supply for first six months, 1920, by operating districts. The unassigned percentage and the assigned and unassigned percentage, respectively, for the five districts are as follows: New River, 46.5, 53.4; Kanawha, 49, 51.3; Coal River, 50.5, 52.7; Logan, 49.9, 52.5; Kentucky, 45.8, 49. The total
3156 unassigned percentage for all districts is shown to be 48.6, the assigned and unassigned percentage combined 52, and the excess of combined percentage over unassigned percentage 3.4.

Ex. 78 (Waffle): 6-page copy of rules proposed by Jonas Waffle, secretary, Indiana Coal Trade Bureau, to govern distribution of open-top cars to bituminous coal mines under the "round robin" plan of car distribution and for application in State of Indiana.

Ex. 79 (Waffle): 1-page statement relating to joint and local mines.

Ex. 80 (Davin): 7-page copy of proposed rules of the Chesapeake & Ohio Railway to supersede Circular C. S. 31 (revised) in respect to the rating of coal mines.

Ex. 81 (Higgins): 2-page copy of rules for mine ratings, proposed by White Oak Coal Company.

Ex. 82 (McAuliffe). 1-page printed copy of mine rating and car distribution rules submitted by Eugene McAuliffe as a substitute for Circular C. S. 31 (revised).

Ex. 83 (Poston): 2-page exhibit relating to car shortages, car surpluses, ton miles, and average revenue freight loaded (1,000 cars). Sheet 1 contains a statement referring to the chart on sheet 2 and includes the following language: "During the past 130 months

(1912 to November, 1922) the country has passed through 87 months of car surplus and 43 months of car shortage." The chart shows by months for the period from January 1, 1918, to October 1, 1922, weekly average revenue freight loaded (1,000 cars), billion ton miles, daily average available surplus (1,000 cars), and shortage (1,000 cars).

Ex. 84: 2-page letter, dated November 24, 1922, from W. A. Northcutt, general solicitor, L. & N. R. R. Co., to Commissioner Aitchison, transmitting statements pertaining to coal car supply on the L. & N. in the month of May, 1922, and 5-page statement showing for that month daily rating and monthly rating in cars
3157 for each division of the railroad, L. & N. Company fuel cars, ordered, furnished, and loaded; foreign railway fuel cars ordered, furnished, and loaded; private cars, including Lynch, Benham No. 2, Coxton and Kayu, ordered, furnished, and loaded; and commercial cars ordered, furnished, and loaded.

Ex. 85 (Callahan); 6-page copy of mine rating and car distribution rules proposed by National Coal Association.

Ex. 86 (Callahan): 4-page statement illustrating proposed changes in the mine-rating rules.

Ex. 87 (Callahan): 4 sheets. First sheet contains form of monthly bulletin to record information as to coal car distribution. Second sheet contains explanation of reference marks on first sheet. Third and fourth sheets contain extracts from C. & O. records for month of May, 1922, with respect to car distribution.

Ex. 88 (Callahan): 1-page statement illustrating physical coal distribution under the proposed uniform report.

Ex. 89 (Callahan): 1-page statement illustrating physical coal carrying capacity of several types of gondola cars and how the methods of charging them under rule 5 of C. S. 31 (revised) results in car capacity being charged that is not available for coal loading.

Ex. 90 (Spangler): 36-page exhibit relating to the system of mine rating and coal car distribution in effect on the Norfolk & Western Railway prior to C. S. 31. The statement has reference almost entirely to methods of and rules governing mine rating. The rules which prevail as to car distribution are shown on sheets 7 and 12 of the exhibit.

Ex. 91 (Fletcher): 1-page statement as to car distribution on M. K. & T. lines by weeks, October 2 through October 31, 1922. The statement shows total rating, total cars ordered, total cars placed, total cars loaded, per cent of cars ordered to rating, per cent of cars placed to rating, and per cent of cars loaded to rating. Assigned cars and commercial cars are separately shown under the heading "Total cars loaded" and under the heading "Total cars placed."

3158 Ex. 92 (Fletcher): 1-page statement showing for Virginian Railway Company for the period October 2 through October

31, 1922, data with respect to car distribution under the same headings as Ex. 91.

Ex. 93 (Fletcher): 1-page statement showing for St. Louis-San Francisco Railway Company for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91. Under heading "Total cars placed" there is the statement "No assigned cars."

Ex. 94 (Fletcher): 1-page statement showing for Norfolk & Western Railway Company for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91. A note explaining "assigned cars" reads "Only cars placed for N. & W. home fuel supply at mines owned by it or at mines whose entire output the railway company contracted were treated as assigned cars."

Ex. 95 (Fletcher): 1-page statement showing for Louisville & Nashville Railroad Company for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91.

Ex. 96 (Fletcher): 1-page statement showing for Rock Island (C. R. I. & P., C. R. I. & G.) Railroad Company for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91.

Ex. 97 (Fletcher): 1-page statement showing for Southern Railway System for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91.

Ex. 98 (Fletcher): 1-page statement showing for Illinois Central Railroad Company for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91.

3159 Ex. 99 (Fletcher): 1-page statement showing for Chicago, Milwaukee & St. Paul Railroad Company for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91.

Ex. 100 (Fletcher): 1-page statement showing for C. T. H. & S. E. division of Chicago, Milwaukee & St. Paul Railroad for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91.

Ex. 101 (Fletcher): 1-page statement showing for Chicago, Burlington & Quincy Railroad for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91.

Ex. 102 (Gutheim): 2-page statement showing assigned car practices prevailing during October, 1922, on class 1 railroads, and bituminous coal loading railroads not included in class 1.

Statement showing, for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deduced potential capacity, by weeks, for calendar year 1922

[Page No. 1.] [I. C. C. Dockets Nos. 12530 & 13896. December 11, 1922.]

1922, week ending—	1 Cars required	2 Cars furnished	3 % cars furn. to cars req.	4 Cars loaded	5 Approximate tonnage produced in cars loaded on 50 ton basis	6 Tonnage for which cars ordered on 50-ton basis	7 Per cent of full time worked by all mines entire United States	8 Total bituminous coal production entire United States	9 Potential production entire United States	10 Approximate tonnage produced and not shipped from mine by railroad
January 7	174,590	243,119	139	138,396	6,920,000	8,730,000	47.0	7,476,000	15,906,000	556,000
14	196,184	267,848	137	153,770	7,689,000	9,809,000	46.2	8,302,000	17,970,000	613,000
21	204,871	278,865	136	163,134	8,157,000	10,244,000	48.8	8,782,000	17,996,000	625,000
28	220,787	277,527	126	179,127	8,956,000	11,039,000	53.5	9,615,000	17,972,000	659,000
February 4	224,635	280,083	125	180,567	9,028,000	11,232,000	54.0	9,714,000	17,989,000	686,000
11	233,547	291,002	125	191,808	9,590,000	11,677,000	57.4	10,309,000	17,960,000	719,000
18	237,893	293,798	124	190,983	9,549,000	11,895,000	57.1	10,285,000	18,012,000	736,000
25	238,862	291,380	122	192,340	9,617,000	11,943,000	57.8	10,402,000	17,997,000	785,000
March 4	243,458	289,231	123	195,615	9,781,000	12,173,000	58.6	10,541,000	17,988,000	760,000
11	251,206	308,195	123	206,183	10,309,000	12,563,000	61.8	11,102,000	17,964,000	793,000
18	251,327	314,877	125	201,471	10,074,000	12,566,000	60.3	10,843,000	17,982,000	769,000
25	263,471	332,090	126	212,376	10,619,000	13,174,000	63.7	11,448,000	17,972,000	829,000
April 1	252,747	325,501	129	193,164	9,658,000	12,637,000	58.0	10,469,000	18,050,000	811,000
8	97,918	165,102	169	66,825	3,341,000	4,896,000	(1)	3,835,000	(1)	(1)
15	91,096	148,929	163	64,513	3,226,000	4,555,000	(1)	3,656,000	(1)	(1)
22	92,545	146,083	158	64,367	3,218,000	4,627,000	(1)	3,575,000	(1)	(1)
29	99,462	131,780	132	75,708	3,785,000	4,973,000	(1)	4,175,000	(1)	(1)
May 6	101,195	136,542	135	75,447	3,772,000	5,060,000	(1)	4,164,000	(1)	(1)
13	104,913	141,290	135	80,511	4,026,000	5,246,000	(1)	4,433,000	(1)	(1)
20	104,118	124,749	120	81,405	4,070,000	5,206,000	(1)	4,481,000	(1)	(1)
27	113,748	146,362	129	89,029	4,451,000	5,687,000	(1)	4,889,000	(1)	(1)
June 3	107,671	128,753	120	83,983	4,199,000	5,384,000	(1)	4,616,000	(1)	(1)
10	115,060	137,236	119	93,570	4,679,000	5,753,000	(1)	5,136,000	(1)	(1)
17	122,262	146,389	120	91,407	4,570,000	6,113,000	(1)	5,013,000	(1)	(1)
24	127,065	148,713	117	97,966	4,898,000	6,353,000	(1)	5,363,000	(1)	(1)

July 1	124,721	133,787	107	95,411	4,771,000	6,236,000	(1)	5,226,000	(1)	(1)
8	102,714	110,260	107	66,875	3,344,000	5,136,000	(1)	3,678,000	(1)	(1)
15	130,004	110,064	85	75,376	3,769,000	6,500,000	(1)	4,123,000	(1)	(1)
22	134,442	96,849	72	67,251	3,363,000	6,722,000	(1)	3,692,000	(1)	(1)
29	142,303	100,476	71	71,423	3,571,000	7,115,000	(1)	3,952,000	(1)	(1)
August 5	128,565	110,366	86	78,153	3,908,000	6,428,000	(1)	4,313,000	(1)	(1)
12	143,247	117,946	82	83,723	4,186,000	7,162,000	(1)	4,606,000	(1)	(1)
19	153,906	120,934	79	83,498	4,175,000	7,695,000	(1)	4,609,000	(1)	(1)
26	215,011	117,369	82	123,387	6,169,000	10,751,000	(1)	6,736,000	(1)	(1)
September 2	293,839	230,451	78	173,186	8,659,000	14,692,000	(1)	9,359,000	(1)	(1)
9	292,874	214,063	73	162,492	8,125,000	14,644,000	(1)	8,791,000	(1)	(1)
16	350,861	219,692	63	181,352	9,068,000	17,543,000	(1)	9,737,000	(1)	(1)
23	367,616	212,685	58	181,346	9,067,000	18,381,000	(1)	9,747,000	(1)	(1)
30	381,878	211,061	55	182,158	9,108,000	19,094,000	(1)	9,822,000	(1)	(1)
October 7	391,941	207,759	53	180,163	9,008,000	19,597,000	(1)	9,736,000	(1)	(1)
14	404,098	211,214	52	186,952	9,348,000	20,205,000	(1)	10,110,000	(1)	(1)
21	415,511	215,943	52	191,355	9,568,000	20,776,000	(1)	10,378,000	(1)	(1)
28	421,957	224,158	53	196,342	9,817,000	21,098,000	(1)	10,683,000	(1)	(1)
November 4	418,172	225,355	54	196,353	9,818,000	20,909,000	(1)	10,666,000	(1)	(1)
11	388,512	214,768	55	185,387	9,269,000	19,426,000	(1)	10,147,000	(1)	(1)
18	426,277	233,336	55	205,213	10,261,000	21,314,000	(1)	11,215,000	(1)	(1)
25	429,809	229,036	53	202,305	10,115,000	21,490,000	(1)	11,038,000	(1)	(1)
December 2	383,174	216,317	56	188,345						
9										
16										
23										
30										

[1] Information not available account of miners' strike.

[2] Information not published by Geological Survey.

NOTES.—Includes bituminous and lignite mines in every instance. Information shown in columns 1, 2, 3, and 4 taken from weekly coal loading reports of car service division, American Railway Association. Information shown in columns 5 and 6 deduced from columns 1 and 4. Information shown in columns 7 and 8 taken from weekly reports coal production of U. S. Geological Survey. Information shown in column 9 deduced from columns 7 and 8. Information shown in column 10 deduced from columns 5 and 8.

Statement showing, for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deduced potential capacity, by weeks, for calendar year 1922—Continued

[Page No. 2.]

1922, week ending—	1 Cars required	2 Cars furnished	3 % cars furn. to cars req.	4 Cars loaded	5 Approximate tonnage produced in cars loaded on 50 ton basis	6 Tonnage for which cars ordered on 50-ton basis	7 Percent of full time worked by all mines entire United States	8 Total bituminous coal production entire United States	9 Potential production entire United States	10 Approximate tonnage produced and not shipped from mine by railroad
January 1	238,888	266,868	112	178,108	8,905,000	11,944,000	67.0	9,633,000	14,378,000	728,000
8	249,333	306,295	123	196,429	9,821,000	12,467,000	66.0	10,763,000	16,308,000	942,000
15	233,597	288,211	123	180,160	9,008,000	11,680,000	57.3	9,936,000	17,340,000	928,000
22	221,185	271,393	123	167,780	8,389,000	11,059,000	53.2	9,184,000	17,263,000	795,000
29	200,885	256,433	128	155,680	7,784,000	10,044,000	47.4	8,570,000	18,080,000	786,000
February 5	194,670	256,449	132	147,521	7,376,000	9,734,000	45.4	8,132,000	17,911,000	756,000
12	184,770	255,507	138	142,981	7,149,000	9,239,000	43.6	7,859,000	18,025,000	710,000
19	178,925	252,334	141	136,722	6,836,000	8,946,000	41.1	7,489,000	18,221,000	653,000
26	178,178	245,297	138	137,790	6,890,000	8,909,000	42.8	7,432,000	17,364,000	542,000
March 5	175,657	242,568	138	133,527	6,676,000	8,783,000	40.1	7,278,000	18,149,000	602,000
12	168,169	239,271	142	126,366	6,318,000	8,408,000	37.4	6,900,000	18,449,000	582,000
19	162,478	239,002	147	119,604	5,980,000	8,124,000	36.1	6,512,000	18,038,000	532,000
26	161,778	249,348	154	119,599	5,980,000	8,089,000	36.0	6,457,000	17,936,000	477,000
April 2	145,403	230,327	158	107,312	5,366,000	7,270,000	36.1	5,822,000	16,127,000	456,000
9	144,468	230,223	159	113,102	5,655,000	7,223,000	33.1	6,120,000	18,489,000	465,000
16	150,867	230,030	152	120,862	6,043,000	7,343,000	35.8	6,528,000	18,234,000	485,000
23	154,680	224,058	145	126,855	6,343,000	7,734,000	38.0	6,815,000	17,934,000	472,000
30	159,085	221,351	139	130,090	6,505,000	7,954,000	38.8	6,984,000	18,000,000	479,000
May 7	164,639	231,288	140	136,752	6,838,000	8,232,000	40.7	7,391,000	18,159,000	553,000
14	175,052	239,199	137	149,349	7,467,000	8,753,000	44.4	8,009,000	18,038,000	542,000
21	178,911	239,387	134	148,707	7,435,000	8,916,000	44.3	7,989,000	18,033,000	554,000
28	182,603	246,295	135	151,772	7,589,000	9,109,000	45.5	8,166,000	17,947,000	577,000
June 4	157,090	220,193	140	127,928	6,396,000	7,855,000	44.4	6,835,000	15,394,000	439,000
11	177,123	248,817	140	149,072	7,454,000	8,856,000	44.1	8,010,000	18,163,000	556,000
18	170,878	245,847	144	141,218	7,061,000	8,544,000	41.9	7,551,000	18,021,000	490,000
25	174,035	243,069	140	143,977	7,199,000	8,702,000	42.8	7,704,000	18,000,000	505,000
July 2	171,805	240,223	140	143,164	7,158,000	8,590,000	42.6	7,658,000	17,976,000	500,000
9	138,565	202,846	146	114,804	5,740,000	6,928,000	42.0	6,165,000	14,678,000	425,000
16	167,927	241,625	144	137,226	6,861,000	8,396,000	41.2	7,401,000	17,963,000	540,000
23	168,843	242,260	143	138,723	6,936,000	8,442,000	40.8	7,380,000	18,068,000	444,000
30	166,351	237,334	143	138,944	6,947,000	8,318,000	40.5	7,319,000	18,072,000	372,000

August 6	166,135	236,779	148	120,070	6,804,000	8,367,000	39.7	7,196,000	18,100,000	382,000
13	172,107	243,958	139	146,136	7,307,000	8,755,000	42.0	7,771,000	18,072,000	494,000
20	175,405	242,825	138	143,645	7,183,000	8,770,000	42.8	7,708,000	18,099,000	525,000
27	179,804	247,067	137	145,914	7,295,000	8,904,000	43.1	7,753,000	18,099,000	497,000
September 3	175,597	244,362	139	142,749	7,137,000	8,779,000	42.3	7,606,000	17,961,000	468,000
10	162,668	226,277	140	131,693	6,585,000	8,133,000	42.6	7,063,000	17,825,000	433,000
17	156,887	216,226	137	122,285	7,614,000	9,344,000	45.6	8,167,000	17,953,000	573,000
24	153,660	216,962	134	159,796	7,998,000	9,683,000	47.6	8,527,000	18,032,000	590,000
October 1	160,208	220,306	131	165,313	8,316,000	9,993,000	49.3	8,834,000	18,087,000	574,000
8	166,228	226,966	130	170,392	8,518,000	10,246,000	50.5	9,134,000	18,016,000	616,000
15	204,927	276,651	124	181,119	9,056,000	10,968,000	53.9	9,711,000	17,995,000	655,000
22	219,356	271,929	116	205,780	10,289,000	12,189,000	61.4	9,049,000	17,990,000	760,000
29	243,778	302,745	105	204,733	10,237,000	12,024,000	60.9	11,956,000	18,110,000	719,000
November 5	252,473	305,553	116	173,801	8,690,000	11,134,000	51.5	9,327,000	16,334,000	637,000
12	222,671	283,530	125	157,846	7,892,000	10,124,000	52.6	8,562,000	17,993,000	700,000
19	202,476	270,424	133	165,187	8,259,000	10,472,000	49.3	8,871,000	17,963,000	612,000
26	204,443	270,621	142	131,541	6,577,000	8,598,000	46.8	7,101,000	15,173,000	524,000
December 3	171,353	245,652	149	131,593	6,580,000	8,885,000	36.5	7,312,000	17,987,000	525,000
10	177,997	255,960	151	136,310	6,766,000	8,917,000	40.5	7,063,000	18,054,000	546,000
17	178,539	262,960	152	130,201	6,510,000	8,675,000	39.2	7,450,000	18,017,000	553,000
24	173,508	264,143	146	137,782	6,889,000	9,019,000	41.3	7,450,000	18,038,000	561,000
31	180,386	220,319	147	110,721	5,536,000	7,510,000	39.9	6,995,000	15,002,000	450,000
	150,199									

Statement showing, for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deducted potential capacity, by weeks, for calendar year 1922—Continued

[Page No. 3.]

1922, week ending—	1 Cars required	2 Cars furnished	3 % cars furn. to cars req.	4 Cars loaded	5 Approximate tonnage produced in cars loaded on 50 ton basis	6 Tonnage for which cars ordered on 50-ton basis	7 Percent of full time worked by all mines entire United States	8 Total bituminous coal production entire United States	9 Potential production entire United States	10 Approximate tonnage produced and not shipped from mine by railroad
January 3	263,453	259,271	98	193,580	9,679,000	13,172,000	78.2	11,062,000	14,145,000	1,383,000
10	299,306	247,726	83	201,728	10,086,000	14,965,000	67.8	11,323,000	16,700,000	1,237,000
17	310,749	337,319	109	204,363	10,218,000	15,537,000	65.4	11,507,000	17,594,000	1,289,000
24	306,091	219,484	72	185,879	9,294,000	15,304,000	59.5	10,464,000	17,586,000	1,170,000
31	316,457	213,952	68	186,213	9,310,000	15,822,000	57.8	10,594,000	18,328,000	1,284,000
February 7	315,556	202,810	64	177,938	8,897,000	15,777,000	56.6	10,010,000	17,685,000	1,113,000
14	318,125	210,546	66	185,953	9,298,000	15,906,000	58.6	10,484,000	17,891,000	1,186,000
21	314,822	195,229	62	167,405	8,370,000	15,741,000	54.6	9,513,000	17,423,000	1,143,000
28	316,579	206,744	65	179,811	8,990,000	15,829,000	57.0	10,145,000	17,796,000	1,155,000
March 6	319,496	212,560	67	184,575	9,228,000	15,974,000	58.9	10,304,000	17,494,000	1,076,000
13	325,571	204,860	32	182,507	9,125,000	16,278,000	57.2	10,277,000	17,966,000	1,152,000
20	326,282	208,719	64	183,149	9,157,000	16,314,000	56.6	10,348,000	18,282,000	1,191,000
27	328,275	220,373	67	195,447	9,772,000	16,413,000	58.7	10,998,000	18,704,000	1,226,000
April 3	289,372	208,611	72	171,402	8,570,000	14,468,000	58.4	9,715,000	16,635,000	1,145,000
10	308,066	212,948	69	169,229	8,461,000	15,403,000	55.7	9,644,000	17,314,000	1,183,000
17	316,252	168,641	53	137,700	6,885,000	15,812,000	43.3	7,563,000	17,466,000	675,000
24	320,009	178,977	56	152,414	7,620,000	16,000,000	46.4	8,485,000	18,286,000	865,000
May 1	325,810	184,916	57	159,711	7,985,000	16,290,000	46.2	8,896,000	19,255,000	911,000
8	328,448	191,400	58	164,103	8,205,000	16,422,000	48.9	9,069,000	18,546,000	864,000
15	329,630	182,049	55	156,924	7,846,000	16,481,000	46.3	8,756,000	18,911,000	910,000
22	332,550	189,994	57	163,946	8,197,000	16,627,000	48.5	9,252,000	19,076,000	1,055,000
29	334,131	195,381	58	168,983	8,449,000	16,706,000	50.2	9,568,000	19,059,000	1,119,000
June 5	307,492	190,030	62	161,140	8,057,000	15,374,000	53.7	9,141,000	17,022,000	1,084,000
12	345,203	208,354	60	185,055	9,252,000	17,260,000	54.6	10,355,000	18,965,000	1,103,000
19	344,495	207,927	60	179,501	8,975,000	17,225,000	53.9	10,095,000	18,729,000	1,120,000
26	346,293	212,338	61	188,649	9,432,000	17,314,000	55.5	10,556,000	19,020,000	1,124,000

July 3	343,411	213,890	62	184,632	9,231,000	17,170,000	55.0	10,286,000	18,702,000	1,055,000
10	294,911	224,346	76	174,486	8,724,000	14,745,000	64.3	9,659,000	15,022,000	935,000
17	340,203	238,899	70	195,937	9,797,000	17,010,000	58.2	10,930,000	18,780,000	1,133,000
24	330,151	235,283	71	190,049	9,502,000	16,507,000	57.7	10,470,000	18,146,000	968,000
31	296,105	223,133	75	164,666	8,233,000	14,805,000	46.0	9,371,000	20,372,000	1,138,000
August 7	313,356	244,695	78	188,055	9,402,000	15,667,000	58.6	10,432,000	17,802,000	1,030,000
14	333,613	260,018	78	211,658	10,582,000	16,680,000	65.8	11,813,000	17,953,000	1,231,000
21	328,534	250,387	76	196,441	9,822,000	16,426,000	59.9	11,039,000	18,429,000	1,217,000
28	330,916	247,031	75	204,030	10,201,000	16,545,000	60.5	11,383,000	18,815,000	1,182,000
September 4	335,602	242,835	72	199,707	9,985,000	16,780,000	60.2	11,167,000	18,550,000	1,182,000
11	289,390	249,390	86	190,392	9,514,000	14,469,000	66.5	10,685,000	16,068,000	1,171,000
18	320,010	267,578	84	209,192	10,459,000	16,000,000	63.6	11,654,000	18,324,000	1,195,000
25	327,733	270,456	83	212,567	10,628,000	16,386,000	64.5	11,851,000	18,374,000	1,223,000
October 2	329,213	260,673	79	206,009	10,250,000	16,460,000	62.8	11,350,000	18,073,000	1,100,000
9	330,815	265,958	80	217,884	10,894,000	16,540,000	67.9	12,103,000	17,825,000	1,209,000
16	328,910	262,318	80	217,245	10,862,000	16,445,000	68.0	12,110,000	17,809,000	1,248,000
23	332,369	270,114	81	220,927	11,046,000	16,618,000	68.1	12,232,000	17,962,000	1,188,000
30	334,183	267,955	80	223,851	11,192,000	16,709,000	68.7	12,407,000	18,060,000	1,215,000
November 6	305,570	282,615	89	206,041	10,302,000	15,278,000	71.8	11,429,000	15,918,000	1,127,000
13	324,108	281,191	87	220,063	11,003,000	16,205,000	67.9	12,132,000	17,867,000	1,129,000
20	331,151	266,665	81	211,912	10,595,000	16,557,000	64.6	11,693,000	18,101,000	1,098,000
27	298,988	258,323	86	207,762	10,388,000	14,949,000	72.1	11,488,000	15,933,000	1,100,000
December 4	332,947	283,794	85	232,782	11,639,000	16,647,000	71.1	12,812,000	18,020,000	1,173,000
11	330,583	281,058	85	234,352	11,717,000	16,529,000	71.5	12,865,000	17,993,000	1,148,000
18	312,369	286,017	92	221,623	11,081,000	15,618,000	67.8	12,155,000	17,928,000	1,074,000
25	245,894	237,209	96	177,934	8,896,000	12,294,000	68.5	9,683,000	14,136,000	787,000

Statement showing, for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deduced potential capacity, by weeks, for calendar year 1922—Continued

Page N4.]

1922, week ending—	1 Cars required	2 Cars furnished	3 % cars furn. to cars req.	4 Cars loaded	5 Approximate tonnage produced in cars loaded on 50 ton basis	6 Tonnage for which cars ordered on 50-ton basis	7 Per cent of full time worked by all mines entire United States	8 Total bituminous coal production entire United States	9 Potential production entire United States	10 Approximate tonnage produced and not shipped from mine by railroad
January 4	196,942	274,167	139	147,567	7,378,000	9,847,000	73.1	8,459,000	11,446,000	1,081,000
11	221,004	294,546	133	180,515	9,026,000	11,050,000	71.9	10,361,000	14,410,000	1,335,000
18	212,030	282,884	133	171,474	8,574,000	10,602,000	68.0	9,883,000	14,533,000	1,309,000
25	204,804	280,390	137	159,918	7,996,000	10,240,000	61.3	9,236,000	15,066,000	1,240,000
February 1	188,983	296,209	157	144,550	7,228,000	9,449,000	56.4	8,316,000	14,744,000	1,088,000
8	181,772	300,875	166	136,543	6,827,000	9,089,000	52.5	7,947,000	15,108,000	1,120,000
15	180,066	298,986	166	134,554	6,728,000	9,003,000	51.3	7,700,000	15,009,000	972,000
22	173,543	297,408	171	135,288	6,764,000	8,677,000	51.5	7,722,000	14,965,000	958,000
March 1	179,122	305,661	171	141,813	7,091,000	8,956,000	52.9	8,090,000	15,293,000	999,000
8	179,503	306,208	171	140,496	7,025,000	8,975,000	53.0	8,081,000	15,247,000	1,056,000
15	178,996	305,432	171	139,985	6,999,000	8,950,000	52.4	8,050,000	15,362,000	1,051,000
22	170,811	305,265	179	133,654	6,683,000	8,541,000	48.8	7,484,000	15,336,000	801,000
29	168,873	299,072	177	133,828	6,691,000	8,444,000	49.4	7,592,000	15,368,000	901,000
April 5	159,687	270,595	169	122,376	6,119,000	7,984,000	47.3	6,984,000	14,765,000	865,000
12	168,189	288,704	172	134,487	6,724,000	8,409,000	50.1	7,544,000	15,057,000	820,000
19	170,201	291,405	171	133,467	6,673,000	8,510,000	49.7	7,411,000	14,911,000	738,000
26	173,958	290,747	167	132,125	6,606,000	8,698,000	50.6	7,378,000	14,581,000	772,000
May 3	180,813	293,900	163	143,435	7,172,000	9,041,000	53.3	8,022,000	15,050,000	850,000
10	181,866	297,606	164	152,546	7,627,000	9,093,000	55.1	8,438,000	15,203,000	811,000
17	186,817	291,337	156	155,138	7,757,000	9,341,000	56.1	8,436,000	15,037,000	679,000
24	188,573	293,024	155	156,766	7,838,000	9,429,000	57.9	8,724,000	15,067,000	886,000
31	178,482	267,139	150	143,151	7,158,000	8,924,000	53.4	7,938,000	14,865,000	780,000
June 7	193,045	293,675	152	160,237	8,012,000	9,652,000	59.0	8,927,000	15,130,000	915,000
14	195,152	285,627	146	159,393	7,970,000	9,758,000	57.5	8,485,000	14,756,000	515,000
21	200,337	264,467	132	156,652	7,833,000	10,017,000	58.1	8,681,000	14,941,000	848,000
28	209,205	268,872	129	169,490	8,475,000	10,460,000	61.8	9,470,000	15,323,000	995,000
July 5	178,195	227,298	128	134,771	6,739,000	8,910,000	58.6	7,459,000	12,925,000	720,000
12	222,975	275,798	124	182,738	9,137,000	11,149,000	67.6	10,225,000	15,125,000	1,088,000
19	231,142	260,532	113	176,314	8,816,000	11,557,000	63.9	9,889,000	15,500,000	1,073,000
26	241,740	247,667	102	178,096	8,905,000	12,087,000	62.5	9,988,000	16,000,000	1,083,000

August 2	245,702	234,110	95	175,877	8,794,000	12,285,000	61.8	9,942,000	16,100,000	1,148,000
9	250,701	213,978	85	166,662	8,333,000	12,535,000	58.7	9,359,000	16,000,000	1,026,000
16	257,572	204,535	79	161,708	8,085,000	12,879,000	55.5	9,092,000	16,400,000	1,007,000
23	265,289	237,406	89	192,414	9,621,000	13,264,000	68.2	10,662,000	15,633,000	1,041,000
30	274,950	219,508	80	185,823	9,291,000	13,748,000	65.9	10,457,000	15,867,000	1,166,000
September 6	243,992	214,165	88	168,973	8,449,000	12,200,000	70.3	9,663,000	13,745,000	1,214,000
13	282,820	234,877	83	197,579	9,879,000	14,141,000	69.4	11,062,000	15,939,000	1,183,000
20	285,392	240,256	84	201,589	10,079,000	14,270,000	71.4	11,248,000	15,753,000	1,169,000
27	290,434	248,958	86	207,812	10,391,000	14,522,000	72.4	11,606,000	16,030,000	1,215,000
October 4	291,145	250,163	86	209,585	10,479,000	14,557,000	73.8	11,528,000	15,620,000	1,049,000
11	292,116	252,765	87	214,717	10,736,000	14,606,000	74.0	11,881,000	16,055,000	1,145,000
18	290,607	248,915	84	211,617	10,581,000	14,830,000	73.8	11,832,000	16,032,000	1,251,000
25	296,823	282,432	95	235,770	11,789,000	14,841,000	81.8	13,135,000	16,057,000	1,346,000
November 1	268,894	293,835	109	219,085	10,954,000	13,445,000	(1)	12,111,000	(1)	1,157,000
8	79,350	98,624	124	55,555	2,778,000	3,968,000	(1)	3,552,000	(1)	774,000
15	85,669	102,771	120	63,441	3,172,000	4,283,000	(1)	4,026,000	(1)	854,000
22	122,611	139,099	113	88,498	4,425,000	6,131,000	(1)	5,344,000	(1)	919,000
29	115,786	145,264	125	87,710	4,386,000	5,789,000	(1)	5,326,000	(1)	940,000
December 6	114,534	137,505	120	85,678	4,284,000	5,727,000	(1)	5,245,000	(1)	961,000
13	134,430	150,192	112	98,003	4,900,000	6,722,000	(1)	5,800,000	(1)	900,000
20	260,890	271,943	104	185,227	9,261,000	13,045,000	78.4	10,501,000	13,394,000	1,240,000
27	231,552	209,543	90	153,616	7,681,000	11,578,000	69.0	8,531,000	12,636,000	850,000

[1] Information not available account of miners' strike.

Statement showing, for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deduced potential capacity, by weeks, for calendar year 1922—Continued

[Page No. 5.]

1922, week ending—	1 Cars required	2 Cars furnished	3 % cars furn. to cars req.	4 Cars loaded	5 Approximate tonnage produced in cars loaded on 50 ton basis	6 Tonnage for which cars ordered on 50-ton basis	7 Per cent of full time worked by all mines entire United States	8 Total bituminous coal production entire United States	9 Potential production entire United States	10 Approximate tonnage produced and not shipped from mine by railroad
January 5	281,052	208,631	74	171,610	8,581,000	14,053,000	73.1	9,376,000	12,826,000	795,000
12	305,496	214,500	70	189,279	9,464,000	15,275,000	65.4	10,136,000	15,498,000	672,000
19	306,762	178,033	58	153,894	7,695,000	15,338,000	55.8	8,566,000	15,351,000	871,000
26	320,119	206,823	65	182,402	9,120,000	16,006,000	66.1	10,100,000	15,279,000	980,000
February 2	311,603	204,232	66	172,701	8,635,000	15,580,000	60.6	9,483,000	15,648,000	848,000
9	317,421	212,374	67	184,206	9,210,000	15,871,000	64.6	10,111,000	15,700,000	901,000
16	327,231	231,698	71	198,925	9,946,000	16,362,000	71.6	11,122,000	15,533,000	1,176,000
23	316,399	222,611	70	193,827	9,691,000	15,820,000	68.3	10,616,000	15,543,000	925,000
March 2	324,317	226,848	70	200,905	10,045,000	16,216,000	70.7	10,111,000	15,715,000	66,000
9	323,873	228,697	71	204,364	10,218,000	16,194,000	70.6	11,265,000	15,956,000	1,047,000
16	327,247	215,211	66	193,821	9,691,000	16,362,000	66.8	10,922,000	16,350,000	1,231,000
23	318,441	220,418	69	191,718	9,586,000	15,922,000	69.3	10,998,000	15,870,000	1,412,000
30	322,846	215,689	67	187,974	9,399,000	16,142,000	66.2	10,888,000	16,447,000	1,489,000
April 6	284,635	207,207	73	160,450	8,023,000	14,232,000	62.3	9,319,000	14,958,000	1,296,000
13	312,855	224,394	72	187,332	9,367,000	15,643,000	70.1	10,835,000	15,456,000	1,468,000
20	314,951	234,365	74	188,295	9,415,000	15,748,000	72.2	11,123,000	15,405,000	1,708,000
27	312,710	240,085	77	204,917	10,246,000	15,636,000	74.7	11,804,000	15,801,000	1,558,000
May 4	311,134	242,858	78	204,555	10,228,000	15,557,000	75.6	11,554,000	15,283,000	1,326,000
11	307,522	246,616	80	207,387	10,369,000	15,376,000	76.6	11,805,000	15,411,000	1,436,000
18	305,839	243,579	80	205,808	10,290,000	15,292,000	76.0	11,718,000	15,418,000	1,428,000
25	299,470	246,476	82	205,832	10,292,000	14,974,000	75.8	11,801,000	15,568,000	1,509,000
June 1	270,691	229,988	85	186,793	9,340,000	13,535,000	70.1	10,707,000	15,273,000	1,367,000
8	292,420	267,756	92	215,802	10,790,000	14,621,000	82.3	12,427,000	15,099,000	1,637,000
15	302,092	261,707	87	221,043	11,052,000	15,105,000	80.3	12,606,000	15,698,000	1,554,000
22	302,734	253,016	84	211,442	10,572,000	15,137,000	79.6	11,999,000	15,074,000	1,427,000
29	307,049	263,032	86	220,507	11,025,000	15,352,000	80.0	12,344,000	15,430,000	1,319,000
July 6	257,470	238,183	93	182,979	9,149,000	12,874,000	83.8	10,252,000	12,253,000	1,103,000
13	299,173	286,393	96	234,337	11,717,000	14,959,000	86.8	13,286,000	15,306,000	1,509,000
20	303,547	277,494	91	232,004	11,600,000	15,177,000	85.0	12,924,000	15,204,000	1,324,000
27	306,171	269,074	88	228,352	11,418,000	15,309,000	83.1	12,937,000	15,567,000	1,519,000

August 3	304,180	262,204	86	219,964	10,908,000	15,209,000	82.3	12,545,000	15,243,000	1,547,000
10	301,191	251,613	84	212,946	10,647,000	15,060,000	79.6	12,289,000	15,438,000	1,642,000
17	303,750	242,323	80	209,308	10,465,000	15,188,000	77.7	11,928,000	15,351,000	1,463,000
24	302,292	255,534	85	219,601	10,980,000	15,115,000	81.2	12,636,000	15,561,000	1,656,000
31	295,232	255,620	87	220,858	11,043,000	14,762,000	80.9	12,691,000	15,687,000	1,648,000
September 7	264,399	242,025	92	196,874	9,844,000	13,220,000	85.8	11,215,000	13,071,000	1,371,000
14	278,183	268,350	96	221,459	11,073,000	13,909,000	83.4	12,707,000	15,236,000	1,634,000
21	285,894	271,795	95	223,101	11,155,000	14,295,000	84.5	12,699,000	15,028,000	1,544,000
28	285,034	273,657	96	229,760	11,488,000	14,252,000	85.5	13,043,000	15,254,000	1,555,000
October 5	283,478	268,318	95	221,942	11,097,000	14,174,000	85.2	12,560,000	14,741,000	1,463,000
12	280,248	261,663	93	217,432	10,872,000	14,012,000	82.0	12,250,000	14,939,000	1,378,000
19	265,806	256,557	97	200,103	10,005,000	13,290,000	79.4	11,516,000	14,503,000	1,511,000
26	256,007	256,438	100	196,077	9,804,000	12,800,000	79.0	11,314,000	14,321,000	1,510,000
November 2	252,014	264,428	105	190,873	9,544,000	12,601,000	79.2	10,857,000	13,708,000	1,313,000
9	247,190	280,068	113	183,907	9,195,000	12,360,000	77.6	10,381,000	13,377,000	1,186,000
16	231,936	292,464	126	169,635	8,482,000	11,597,000	73.2	9,724,000	13,284,000	1,242,000
23	242,750	295,767	122	191,366	9,568,000	12,138,000	82.7	10,973,000	13,268,000	1,405,000
30	216,497	294,795	122	169,379	8,469,000	10,825,000	81.9	9,690,000	11,831,000	1,221,000
December 7	237,658	298,548	126	192,396	9,620,000	11,883,000	79.7	10,985,000	13,782,000	1,365,000
14	226,875	270,969	119	184,150	9,208,000	11,344,000	73.4	10,623,000	14,472,000	1,415,000
21	219,624	273,446	125	175,815	8,791,000	10,981,000	71.6	10,137,000	14,157,000	1,346,000
28	164,255	221,390	135	109,989	5,499,000	8,213,000	58.1	6,426,000	11,060,000	927,000

Statement showing, for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deducted potential capacity, by weeks, for calendar year 1922—Continued

[Page No. 6.]

1922, week ending—	1 Cars required	2 Cars furnished	3 % cars furn. to cars req.	4 Cars loaded	5 Approximate tonnage produced in cars loaded on 50-ton basis	6 Tonnage for which cars ordered on 50-ton basis	7 Per cent of full time worked by all mines entire United States	8 Total bituminous coal production entire United States	9 Potential production entire United States	10 Approximate tonnage produced and not shipped from mine by railroad
January 6	256,478	225,589	88	182,718	9,135,000	12,823,000	(1)	10,169,000	(1)	1,034,000
13	263,806	236,217	90	202,712	10,135,000	13,190,000	(1)	11,488,000	(1)	1,353,000
20	285,482	208,210	73	181,055	9,052,000	14,274,000	(1)	10,372,000	(1)	1,320,000
27	286,269	212,971	74	192,653	9,632,000	14,313,000	(1)	10,951,000	(1)	1,319,000
February 3	287,581	213,019	74	185,064	9,253,000	14,379,000	(1)	10,512,000	(1)	1,259,000
10	285,332	200,986	70	173,733	8,686,000	14,266,000	(1)	9,769,000	(1)	1,083,000
17	294,168	206,635	70	180,311	9,015,000	14,708,000	(1)	10,130,000	(1)	1,115,000
24	295,591	221,736	75	191,361	9,568,000	14,779,000	(1)	10,681,000	(1)	1,113,000
March 3	296,841	220,443	74	193,062	9,653,000	14,842,000	(1)	11,058,000	(1)	1,405,000
10	295,058	211,805	72	185,718	9,285,000	14,752,000	(1)	10,979,000	(1)	1,694,000
17	290,595	218,687	75	189,315	9,465,000	14,529,000	(1)	11,191,000	(1)	1,726,000
24	287,856	213,191	74	185,920	9,296,000	14,392,000	(1)	10,983,000	(1)	1,687,000
31	288,322	209,656	73	185,041	9,252,000	14,416,000	(1)	10,940,000	(1)	1,688,000
April 7	251,569	196,283	78	157,943	7,897,000	12,578,000	(1)	8,984,000	(1)	1,087,000
14	270,959	206,744	76	167,846	8,392,000	13,548,000	(1)	9,564,000	(1)	1,172,000
21	267,561	208,634	78	175,188	8,759,000	13,378,000	(1)	9,844,000	(1)	1,085,00000
28	282,993	206,762	73	183,735	9,186,000	14,149,000	(1)	10,171,000	(1)	985,000
May 5	281,495	200,713	71	176,005	8,800,000	14,074,000	(1)	9,952,000	(1)	1,152,000
12	293,201	213,411	73	190,401	9,520,000	14,660,000	(1)	10,677,000	(1)	1,157,000
19	294,551	219,510	75	194,338	9,717,000	14,727,000	(1)	10,727,000	(1)	1,010,000
26	295,155	218,917	74	192,315	9,615,000	14,757,000	(1)	10,770,000	(1)	1,155,000
June 2	270,699	207,749	77	173,592	8,679,000	13,534,000	(1)	10,112,000	(1)	1,433,000
9	285,952	236,237	83	187,823	9,391,000	14,297,000	(1)	10,789,000	(1)	1,398,000
16	295,525	236,143	80	199,916	9,995,000	14,776,000	(1)	11,485,000	(1)	1,490,000
23	297,096	228,026	77	195,669	9,783,000	14,854,000	(1)	11,243,000	(1)	1,460,000
30	304,658	228,848	75	199,131	9,956,000	15,232,000	(1)	11,446,000	(1)	1,490,000
July 7	242,020	207,374	86	157,852	7,892,000	12,101,000	(1)	8,766,000	(1)	874,000
14	283,789	246,235	87	205,670	10,283,000	14,189,000	(1)	11,154,000	(1)	872,000
21	284,927	227,304	80	193,482	9,674,000	14,231,000	(1)	10,623,000	(1)	949,000
28	279,201	226,817	81	195,957	9,798,000	13,960,000	(1)	10,650,000	(1)	852,000

August	11	287,874	216,447	75	184,567	9,228,000	14,393,000	(1)	10,477,000	(1)	1,249,000
	18	271,399	217,695	80	179,162	8,958,000	13,509,000	(1)	10,114,000	(1)	1,156,000
	25	274,259	226,303	83	188,435	9,421,000	13,712,000	(1)	10,586,000	(1)	1,165,000
September	1	281,872	226,820	80	191,512	9,575,000	14,093,000	(1)	10,883,000	(1)	1,308,000
	8	247,700	208,660	84	172,392	8,619,000	12,385,000	(1)	10,059,000	(1)	1,440,000
	15	273,569	232,654	85	191,818	9,590,000	13,678,000	(1)	11,116,000	(1)	1,526,000
	22	277,612	229,589	83	185,946	9,297,000	13,881,000	75.3	10,831,000	14,384,000	1,534,000
	29	283,863	233,633	82	194,146	9,707,000	14,193,000	77.7	11,279,000	14,516,000	1,572,000
October	6	279,869	226,389	81	188,561	9,428,000	13,993,000	77.6	10,962,000	14,126,000	1,534,000
	13	287,939	225,026	78	192,310	9,613,000	14,397,000	76.9	10,924,000	14,205,000	1,398,000
	20	280,632	225,176	80	177,850	8,893,000	14,032,000	65.8	10,125,000	15,288,000	1,232,000
	27	292,248	232,689	80	192,024	9,601,000	14,612,000	74.9	10,884,000	14,531,000	1,483,000
November	3	295,734	227,822	77	191,479	9,574,000	14,787,000	75.4	10,893,000	14,447,000	1,319,000
	10	297,293	232,272	78	202,535	10,127,000	14,865,000	77.8	11,071,000	14,230,000	944,000
	17	305,442	232,313	76	204,451	10,223,000	15,272,000	75.3	11,279,000	14,979,000	1,056,000
	24	299,298	228,416	76	202,618	10,131,000	14,965,000	74.2	11,187,000	15,077,000	1,056,000
December	1	270,844	216,017	80	184,132	9,207,000	13,542,000	74.8	10,565,000	14,124,000	1,358,000
	8	287,760	226,916	79	204,511	10,226,000	14,388,000	73.6	12,143,000	16,490,000	1,917,000
	15	284,340	182,681	64	152,032	7,602,000	14,217,000	57.7	9,193,000	15,932,000	1,591,000
	22	294,342	210,365	71	182,306	9,115,000	14,717,000	68.4	10,923,000	15,969,000	1,808,000
	29	251,898	210,709	84	159,730	7,987,000	12,595,000	75.4	9,737,000	12,914,000	1,750,000

(1) Information not published by Geological Survey.

3161 Ex. 104 (Gutheim): 2-page statement showing names of bituminous coal-loading railroads in the United States, the number
3162 of mines thereon, and the daily rating as of January 1 for years 1916 to 1921, inclusive, and also as of September 12, 1922. 128 railroads are shown. The total number of mines for September 12, 1922, is shown to be 68,919, and the total daily rating in cars, 8,722. The number of mines and daily rating in cars for January 1 each year are respectively as follows: 1921, 8,722, 62,739; 1920, 7,679, 53,410; 1919, 6,916, 43,795; 1918, 6,231, 60,351; 1917, 4,910, 55,225; and 1916, 3,669, 43,987.

Ex. 105 (Gutheim): 2-page statement, the first page showing tonnage, average costs, and prices received for bituminous coal by 532 operating companies reporting to the National Coal Association for the period January 1 to October 31, 1921. The statement is from an exhibit filed by Mr. J. D. A. Morrow, vice president, National Coal Association in Reduced Rates, 1922, I. C. C. Docket No. 13293. The second page is from the same exhibit and shows average f. o. b. mine cost of railroad fuel.

Ex. 106 (Fletcher): 1-page statement showing for Chicago, Indianapolis & Louisville Railway for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91.

Ex. 107 (Fletcher): 1-page statement showing separately for September, October, and November, 1922, the rating and the per cent of distribution on the Illinois division, Springfield division, Wisconsin division, Indiana division, St. Louis division, and Kentucky division of the Illinois Central and the entire system. The system figures were: September, 1922, rating 5,268, per cent 42; October, 1922, rating 5,978, per cent 38; November, 1922, rating 6,179, per cent 41.

Ex. 108 (Morton): 1-page statement containing information concerning private coal cars operating from coal mines on C. & O. first six months of 1922. The names of the owners and the number of cars owned are as follows: New River and Pocahontas Cons. Coal Company, 1,000; Island Creek Coal Company, 150; Kentucky
3163 Solvay Coke Company, 149; Steel & Tube Co. of America, 600; McKinney Steel Co., 500; Witaker Glossner Co., 50; and the Koppers Co., 250, a total of 2,699 cars. The statement shows for each month of the six months the total private cars on line, mileage made, and average miles per day. The number of cars on line varied from 1,759 in June to 2,129 in January. The mileage made varied from 668,868 in January to 936,257 in February. The average miles per car per day varied from 10.1 in January to 16.1 in February.

3164 Ex. 109 (Morton): 1-page statement showing comparison by operating districts, namely, New River, Kanawha, Coal River, Logan, and Kentucky districts of C. & O. Ry. Co., between unassigned percentage car supply for year 1920 under C. S.-31, revised, with system fuel assigned and unassigned percentage of car supply. The totals for the system are unassigned order, 944,104.2

cars; unassigned supply, 482,593.5 cars; unassigned percentage of car supply, 51.1. With Service Order No. 9 cars and cars assigned for development purposes included, the unassigned percentage car supply is shown to be 52.3 and the system fuel assigned and unassigned percentage car supply to be 56. The number of assigned cars ordered is shown to be 114,600.3 and the number placed to be 110,681.6.

Ex. 110 (Morton): 1-page statement for year 1920, showing, for the C. & O. Ry. as a whole, unassigned car supply as compared with unassigned percentage if there had been no private cars on C. & O. rails. The total unassigned order for cars is shown to be 944,104.2; the total order for private cars 52,151.4; and the total unassigned order if no private cars on line 996,255.6. The total unassigned cars available are shown to be 482,593.5; the actual unassigned percentage car supply, 51.1; the percentage that unassigned supply would have been without private cars on line, 48.5; and net decrease in per cent supply without private cars, 2.6.

Ex. 111 (Morton): 1-page statement for year 1920, showing decreased percentage of car supply to unassigned mines on C. & O. Ry., with railway fuel cars prorated and private cars off the line. The exhibit shows the percentage car supply with railway fuel cars prorated and private cars off the line to be 50.1; the actual unassigned car supply to be 51.1; and the net loss to unassigned mines, 1%.

3165 Ex. 112 (Morton): 1-page statement for year 1920, showing increased percentage car supply to unassigned mines on C. & O. Ry., had railway fuel cars been prorated. The total order for all cars is shown to be 1,058,704.5; the private car order to be 52,151.4 cars; S. O. No. 9 and Development Order, 26,429.1; and net order for unassigned cars and railway fuel cars 980,124. The total supply of all cars is shown to be 593,275.1; private car supply, 51,031.8; S. O. No. 9 and development supply, 25,509.7; net supply for unassigned cars and railway fuel cars, 516,733.6; percentage car supply with railway fuel cars prorated, 52.7; unassigned percentage car supply, 51.1; and increased percentage to unassigned mines with railway fuel cars prorated, 1.6.

Ex. 113 (Morton): 1-page statement showing for C. & O. Ry. net increase in tons that would have been produced by individual coal loader if railway fuel cars were prorated and not assigned, assuming (1) that there would have been a net loss of 1.6% to unassigned mines based on their orders because of the assignment of cars for railway fuel during year 1920; (2) that there were 300 working days per year; and (3) that on a 50.1% car supply the individual loader worked 153.3 days. The total order for unassigned cars in the year 1920 is shown to be 944,104.2 cars. 1.6% of this figure is shown to be 15,105.7 cars or 755,284 tons, total loss to unassigned mines. Total loss to individual loader is shown to be 43.8 tons, and at an average earning of 70 cents per net ton the individual coal loader is shown to lose $.20 per day, or $30.66 per year.

Ex. 114 (Morton): 1-page statement showing for C. & O. Ry. comparison of left-over cars at assigned mines and unassigned mines by districts and for the railroad as a whole for year 1920. The per cent of left-over cars at unassigned mines for all districts was 8 and at assigned mines for all districts 10.8.

3166 Ex. 115 (Morton): 1-page statement showing for C. & O. Ry. comparison by months for year 1920 of hours worked, hours lost, number of loaders, and tons per day per loader of unassigned mines and assigned mines, based on information from monthly affidavits submitted by the mines. The total hours worked for the year at unassigned mines are shown to be 543,577; hours lost, 545,107; number of loaders, 176,950; average tons per loader per day, 12.6. The total hours worked for the year at assigned mines are shown to be 102,743; hours lost, 32,729; number of loaders, 23,856; average tons per loader per day, 11.9.

Ex. 116 (Morton): 1-page statement comparing by months for year 1920 number of loaders and tons per loader per day of 6 assigned mines and 6 neighboring unassigned mines on the C. & O. Ry., as taken from monthly reports made under oath. The average tons per loader per day were shown as follows: Greenwood unassigned, 9.5; Layland assigned, 6.9; Southside unassigned, 13.8; Minden 3, assigned, 9.4; Leevale unassigned, 15.7; Dorothy assigned, 13; Sprice River 3, unassigned, 15.4; Boone 10, assigned, 10.5; Monte No. 1, unassigned, 15.7; Mifflin No. 1, assigned, 12.2; Huff Creek unassigned, 21.1; Mallory No. 1 assigned, 19.

Ex. 117 (Morton): 1-page statement showing by months, Jan., 1920, to Aug., 1922, incl., the number of mines shipping coal on the C. & O. Ry., the coal loaders working, average daily order in tons, average daily shipment in tons, and percentage car supply for all mines assigned and unassigned. The average number of mines working in 1920 is shown to be 535; in 1921, 383; in 1922, 398. The maximum order in tons per coal loader is shown to be 11.7, Aug., 1920; 7.3, Dec., 1921; 11.3, Apr., 1922. The minimum order in tons per coal loader is shown to be 8.5, Jan. and Dec., 1920; 4.2, Feb., 1921; 7.8, Jan., 1922. Average order in tons per coal loader is shown to

3167 be 9.8, 1920; 5.8, 1921; and 9.7, 1922. Maximum loading in tons per coal loader is shown to be 5.9, Aug., 1920; 6.1, June, 1921; 8.1, June, 1922. Minimum loading in tons per coal loader is shown to be 4.2, Dec., 1920; 4.1, Jan., 1921; 4, Aug., 1922. Average loading in tons per coal loader is shown to be 5, 1920; 4.7, 1921; and 6.4, 1922, and the maximum number of loaders loading coal, 18,724, Dec., 1920; 18,042, Jan., 1921; 16,694, Aug., 1922. The average per cent car supply for year 1920 was 56, the maximum supply being 64.5% in Sept. of that year. The average per cent car supply for 1921 is shown to be 98.5. The average car supply for the 8 months, 1922, is shown to be 82.4, the per cent car supply ranging from 96.3 to 100% in the first six months and being 53% in July and 40.2 in August.

Ex. 118 (Morton): 1-page statement showing relationship between maximum daily average expectation and performance in daily coal loading on the C. & O. Ry. and the ownership of open top cars, ownership being as shown in Railway Equipment Register, Sept., 1922. The total number of cars is shown to be 43,198 and total capacity in tons 2,417,700. Assuming 6% bad order, the net tons in service are shown to be 2,272,638; the maximum average expectation in tons per coal loader, 8.1; maximum number of coal loaders employed in any month, 18,724; maximum daily expectation in tons for shipment, 151,664 tons. The exhibits contain the following statements: "The C. & O. Ry. has, therefore, sufficient equipment in service to supply cars for 15 mine days, or 17 railroad operation days if mines were loading at rate of 151,664 tons per day. Maximum average daily shipments June, 1922 (largest in history), were 115,190 tons. Based on this tonnage serviceable equipment will supply cars for 19.7 mine days or 22.7 railroad operation days. In addition to the above equipment the C. & O. has under construction 3,000 cars of 57½ tons capacity or 172,500 tons. These cars will be sufficient to supply the maximum expectancy for 1.1 days or a total of 16.1 mine days and 18.1 railroad operation days. Based on largest average daily shipments in history these cars will furnish 1.5 days loading, bringing the total on this basis to 21.2 mine days and 24.2
3168 railroad operation days. Taking as a basis the greatest yearly production, 27,960,140 tons in 1918, the average daily production was 93,205 tons. The C. & O. Ry. Co.'s ownership in cars would furnish full supply on this basis for 23.3 mine days or 26.4 railroad operation days, or with the new equipment ordered would supply the mines for 25.2 mine days or 28.2 railroad operation days."

3169 Ex. 119 (Morton): 1-page statement showing comparison for the C. & O. Railway of percentage of car supply (based on ratings or order where less) with percentage of cars loaded to maximum expectancy in loading and also with percentage of cars loaded to maximum performance in loading, July to November, 1922, inclusive. The maximum average daily loading is shown on the exhibit to be 115,190 tons or 2,338 cars for June, 1922—best month's performance. The maximum average daily expectancy in loading is shown to be 151,664 tons or 3,033 cars. For July, 1922, the percentage of average daily loading to maximum expectancy is shown to be 45.8; the percentage average daily loading to maximum performance, 59.5; and percentage of car supply on ratings or order where less 53. The three percentages for August, September, October, and November are respectively as follows: August, 43.5, 56.5, 40.2; September, 39.8, 51.6, 31.7; October, 46.1, 59.8, 34; November, 49.1, 63.7, 30.4.

Ex. 120 (Morton): 3-page statement for C. & O. Railway showing number of mines shipping coal and tons shipped by districts and by months, January, 1917, to October, 1922, inclusive. The first page shows this information for the years 1917, 1918, and 1919; the second

page, for the years 1920, 1921, and 1922; and the third page contains a summary of the two preceding pages. For the entire period (1919 to October, 1922, inclusive) the minimum number of mines working is shown to be 295 in 1922; the maximum number of mines working 576 in 1922; the average number of mines working in the 6 years 443; per cent of variation in mines working, 95.2; minimum monthly tonnage shipped, 1,231,480 in 1919; maximum monthly tonnage shipped, 2,994,960 in 1922; average monthly tonnage shipped 2,330,010; and per cent of variation in monthly tonnage shipped 143.1.

Ex. 121 (Morton): 2-page statement for C. & O. Railway showing number of mines in operation, number of coal loaders, and
3170 tons shipped, by months and by districts, in territory producing high volatile steam coal from January, 1920, to August 1922, inclusive. The districts shown are Kanawha, Coal River, Logan, and Kentucky.

Ex. 122 (Morton): 1-page statement showing for C. & O. Railway effect on commercial contracts of high volatile mines if railway fuel requirements were prorated on the basis of preferential contracts.

Ex. 123 (Morton): 1-page statement showing for Spruce River No. 2 and No. 3 mines on C. & O. Railway, by months, March, April and May, 1920, tonnage lost on account of assigned cars. The per cent unassigned-car supply for the three months is shown to be 46 and the combined per cent car supply with all cars prorated, 50. The tons the mines would be entitled to on unassigned per cent supply is shown to be 33,073 and the tons entitled to on prorata distribution, 33,227.

Ex. 124 (Morton): 2-page statement for C. & O. Railway showing comparison of coal loaders, hours worked, tons produced, and efficiency of coal loaders at Spruce River 2 and 3 mines and at assigned-car mines (Boone Nos. 1, 3, 4, 5, and 10, and Mordue) in Coal River district for year 1920. Page 1 shows this information by months and page 2 contains a summary for the year. The average tons per coal loader at the unassigned-car mines is shown to be 13.2 and at assigned-car mines, 9.6.

Ex. 125 (Morton): 1-page statement of car supply at Leevale mine on C. & O. Railway by months, January to June, inclusive, 1920. The unassigned per cent car supply of the C. & O. for the six months is shown to be 48.6; the cars the mine was entitled to of this percentage, 787.1; and the cars short, 11.9.

Ex. 126 (Morton): 1-page statement showing for C. & O. Railway for month of November, 1922, percentage of car supply unassigned, 26.2; percentage assigned-car supply including private cars, 84.6; and percentage unassigned and system-fuel supply, 28. Statement also shows comparison of cars to which Ameagle and Leevale
3171 mines were entitled on unassigned per cent car supply and on prorated per cent car supply for month of November, 1922.

he Ameagle mine is shown to be entitled to 68.4 cars on the unas-gned percentage; and to 73.1 cars if all cars except private cars ere prorated.

Ex. 127 (Morton): 1-page statement showing for C. & O. Rail-ay working time of individual loaders at Dorothy, a C. & O. fuel ine, and at Leevale, an adjacent commercial mine, taken from the uly and August, 1920, pay rolls. Dorothy is shown to have 27 ork days in July, with 73 average daily loaders; and 26 work days n August, with 75 average daily loaders. Leevale is shown to have 6 work days in July, with 36 average daily loaders, and 18 work lays in August with 29 average daily loaders. The labor turnover s shown to be at Dorothy in July, 33 men; in August, 21 men: at Leevale in July, 10 men; in August, 22 men. A note states "In August, 1920, Leevale was closed down from August 21 to 31, all but three days not due to car supply. Men did not go to Dorothy, as Dorothy also lost men during the same period." Statement also shows: "Dorothy produced in July, 21,880 tons, or 11.1 tons per coal loader. In August, 19,590 tons, or 10.5 tons per coal loader. Leevale produced in July, 8,167 tons, or 14.2 tons per coal loader. In August, 8,171 tons, or 15.7 tons per coal loader."

Ex. 128 (Vogl): 3-page copy of working hour rules for distribu-tion of cars for transportation of coal. Rule 1 reads: "The dis-tribution of cars for the transportation of coal shall be upon a basis which shall give all mines an opportunity to work approxi-mately the same number and continuity of hours. Inequalities occurring in one calendar week shall be adjusted within the follow-ing calendar week, except as herein otherwise provided." Rule 12 provides: "Cars assigned for loading railroad fuel, must be placed at mines where such fuel is to be loaded, regardless of the number of hours operated; the hours worked shall be charged against such mine and inequalities equalized in the distribution of cars for load-ing commercial coal as provided in rule 1."

3172 Ex. 129 (Spangler): 1-page form letter, dated February 17, 1922, signed by Mr. D. E. Spangler, general superintendent of transportation, Norfolk & Western Railway Company, soliciting bids for railway fuel coal and containing specifications of the low volatile and high volatile coal of the quality desired.

Ex. 130 (Honnold): 2-page statement with respect to the rating of coal mines for distribution of railroad car supply during car shortage periods.

Ex. 131 (Morton): 1-page statement showing comparison of rat-ing results that would be obtained by a strict following of monthly affidavits in the year 1922 under the provisions of Circular C. S.-31 (revised).

Ex. 132 (Farrand): 3 pages, the first page being copy of letter dated July 29, 1920, from Commissioner Aitchison to Mr. Dudley Farrand, assistant to the president, Public Service Corporation of N. J., Newark, N. J., and the second and third pages being a copy

of letter dated July 28, 1920, from Mr. Dudley Farrand to Commissioner Aitchison. The body of the letter of July 28, 1920, reads as follows:

"During recent interviews between yourself and other representatives of the Interstate Commerce Commission, and by statements and correspondence filed, this corporation has shown that operating through its subsidiary companies—Public Service Electric Company, Public Service Gas Company, Public Service Railway Company—it supplies public utilities in the form of light, heat, power, and transportation over a large portion of the State of New Jersey, including the largest cities and towns, and in addition to supplying the individual needs of a population of upwards of two million, also supplies numerous Federal and municipal undertakings as well as essential features of other utility companies.

3173 "Each of the operating companies has firm contracts with responsible coal producing companies for a supply of coal during 1920, sufficient not only for current requirements but for the accumulation of a reasonable stock before winter sets in, in order to provide a reserve suitable and necessary as against the usual reduced capacity of railroad transportation during the winter months.

"Owing to existing conditions the railroads have not been able during the first half of the current year, by reason of car shortage, to handle the full amount of traffic offered and as a result the fuel supply of many localities has been largely depleted, and particularly that of public utilities, which have no control over the amount of their output other than the demands of their customers, has been well-nigh exhausted.

"Through action of your honorable body during the current month, service orders have been issued permitting the assignment to mines supplying public utilities of cars sufficient for current needs but not for storage. The results of such orders, while in operation, must be beneficial to public utilities so far as current requirements are concerned, but in order to provide for future requirements, and particularly in the matter of accumulating reserve stock for winter needs, further relief will be necessary.

"Appreciating as it does the difficult situation confronting the country at large, this corporation, which has always been willing to do its part, stands ready to go beyond its obligations to render assistance. To that end it has tentatively arranged for the purchase of six hundred 55-ton coal cars, to be owned and operated through one of its subsidiary companies, provided it can obtain proper assurance from the Interstate Commerce Commission that if cars are so purchased and delivered, said cars may remain in the exclusive control of Public Service, acting through one or more of its subsidiaries, and be confined to the transporation of coal from certain specified mines to its several plants or works, to the exclusion of

other shippers or consumers in said district or the public in general, in the use of such cars.

3174 "Upon receipt of advice from the Interstate Commerce Commission that cars so purchased can be confined to our own use as outlined, negotiations tentatively undertaken will be pushed to conclusion as promptly as financial, legal, and corporate details can be complied with.

"Trusting for favorable action by your commission, and awaiting your reply, we remain."

The body of the letter dated July 29, 1920, reads as follows:

"I have your letter of July 28th in which you say that the Public Service Corporation of New Jersey has tentatively arranged for the purchase of six hundred 55-ton coal cars, to be owned and operated through one of its subsidiary companies, provided it may be assured that such cars may remain in the exclusive control of the owners and be confined to the transporation of coal from certain specified mines to its several industries or plants.

"In the Hillsdale Coal Case, 19 I. C. C. 356, the commission held that the owners of private cars are entitled to their exclusive use so long as such cars are counted against the distrib ive share of the mines to which they are assigned. That decision, which has not been overruled by any subsequent decision, appears to give you the assurance desired. Your attention is also directed to the McCaa Coal Case, 33 I. C. C. 130, in which the commission held substantially that in fixing mine ratings the mine should be regarded as the unit and not the company that owns the mine, except in cases where one mine had different openings. The McCaa case is understood to mean that the rating of each mine must be determined irrespective of the owner and that cars must be assigned to each mine according to the rating determined."

Ex. 133 (Boyd): 1-page statement entitled "Coal cars of private ownership" and reading as follows: "(a) If on any given day or days the carrier has in its possession system empty coal cars, available for distribution among the mines in any given district, which cannot be placed at the mines because of insufficient motive

3175 power, congestion, lack of facilities, or other causes, on such day or days the carrier will place at mines using only private cars that number of its private coal cars which will not exceed the distributive share of system cars placed at other mines in the same district. (b) No preference whatever will be given coal moving in private coal cars, either in the movement from the mine tracks, or in the transportation over the main line or branches, during periods when there is a shortage of motive power, congestion, lack of facilities or other causes, including derailments, or preference in the delivery of coal moving in private coal cars to connecting carriers. (c) All embargoes will apply to such coal as apply to all other coal and when carriers connecting with the originating carrier are unable to accept traffic and it becomes necessary to 'set out' loaded coal cars

at points between the mines and point of interchange—coal loaded in private cars shall be treated in the same manner as that loaded in system cars."

Ex. 134 (Spangler): 8-page exhibit, the first five pages of which contain tentative draft of rules to govern coal mine rating and car distribution on line of the Norfolk & Western Railway Company and the last two pages of which contain proposed forms of mine reports. The proposed rules in rules Nos. 8, 9, and 10 contain practically the language in rules 8, 9, and 10 of Ex. 1 as to distribution of assigned cars, except rule 8 of Ex. 134 does not include private cars or foreign line railway fuel cars.

Ex. 135 (Gutheim): 1-page statement as to car distribution on Chicago & Alton Railroad, by weeks, October 2 through October 31, 1922. The statement shows total rating, total cars ordered, total cars placed, total cars loaded, per cent of cars ordered to rating, per cent of cars placed to rating, and per cent of cars loaded to rating. Assigned cars and commercial cars are separately shown under the heading "Total cars loaded" and under the heading "Total cars placed." The headings provided for in this exhibit are the same as those in Ex. No. 91.

3176 Ex. 136 (Gutheim): 1-page statement showing for Chesapeake & Ohio Railroad for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91.

Ex. 137 (Gutheim): 1-page statement showing for Chicago & North Western Railroad for the period October 2 through October 31, 1922, data with respect to car distribution under the same headings as Ex. 91.

Ex. 138 (Gutheim): 26-page exhibit containing information with respect to car distribution on the Baltimore & Ohio Railroad. Sheet No. 1 supplements page 1 of Ex. 24 by showing two weeks' additional information in respect to B. & O. coal cars, foreign railroad cars, and private cars on line. Sheet 2 shows for the week ending November 4, 1922, the total B. & O. fuel cars loaded on that railroad were 2,197; foreign fuel cars, 2,130; private fuel cars, 997; total of fuel assigned cars, 5,324; total of commercial cars, 10,617; grand total, 15,941; per cent of fuel cars of the grand total, 33.39. Sheet 3 supplements statement No. 7 of Ex. 24 and shows for October 3, 9, 16, 20, 23, and 24, 1922, the total B. & O. fuel cars loaded to be 2,061; total foreign fuel cars, 1,454; total private fuel cars, 944; total of fuel assigned cars, 4,459; total of commercial cars, 11,624; grand total, 16,083; per cent of fuel cars of the grand total, 27.67. Sheet 4 contains comments as to statement No. 7 of Ex. 24. Sheet 5 is a statement simular to those contained in statement No. 7 in Ex. 24 and is for October 5, 1922. It shows the extent to which the car supply on the B. & O. would have been increased if B. & O. fuel cars had not been assigned. On the whole system the percentage of commercial distribution would have been increased from 23.98 to 29.80.

heet 6 shows similar data for October 12, 1922, the increase being rom 29.83 to 32.25. Sheet 7 is a similar statement for October 19, 922, showing an increase from 23.40 to 28.15. Sheet 8 is a similar statement for October 26, 1922, showing an increase from 27.10 177 to 32.90. Sheet 9 is a statement showing unassigned and assigned cars loaded on October 5, 1922, on B. & O. Railroad y districts, car for car, regardless of capacity. The total unasigned are shown to be 1,066; assigned B. & O. fuel cars, 364; asigned foreign railroad fuel, 78; assigned private cars, 176; total assigned cars, 618; total assigned and unassigned cars, 1,684. Sheet 10 is a similar statement for October 12, 1922, the total unassigned being shown to be 1,352; assigned B. & O. fuel cars, 229; assigned foreign railroad fuel cars, 160; assigned private cars, 208; total assigned cars, 597; and total assigned and unassigned cars, 1,948. Sheet 11 is a similar statement for October 19, 1922, showing total unassigned cars to be 1,108; assigned B. & O. fuel cars, 324; assigned foreign railroad fuel cars, 234; assigned private cars, 162; total assigned cars, 720; total unassigned and assigned cars, 1,828. Sheet 12 is a similar statement for October 26, 1922, showing total unassigned cars to be 1,298; assigned B. & O. Railroad fuel cars, 334; assigned foreign fuel cars, 290; assigned private cars, 233; total assigned cars, 857; total unassigned and assigned cars, 2,155. Sheet 13 contains certain information as to B. & O. contracts and contains the statement that "Correction should be made in the record [p. 1701] to show that the Grand Trunk R. R. Co. had sent in 42,000 cars in two years and not in one year." Sheet 14 relates to Pere Marquette cars on the B. & O. Sheet 15 is a letter dated November 17, 1922, from Mr. C. W. Galloway, vice president of the B. & O. to Commissioner Aitchison, the body of which reads as follows:

"In the hearing yesterday I made note to look into the question you raised, which in substance was whether private cars were allowed to be turned over by the owners to some other mine, at the will of the owners.

"As I recall, I answered that it was not done—that we had at times obtained permission of the owners to use them in the general supply where they were charged, and in some cases where we did not have permission they were taken for short runs where we could get them back without affecting the rights of the owner.

3178 "You asked, however, that I look into it. That I have done, which confirms the statement that private cars have not been taken and used at other mines, except by permission of the owner, and where we have arbitrarily done so, in all such cases the cars have been charged against the mines using them.

"This, of course, is dealing with a temporary arrangement. I don't understand it related to where cars were turned over by the owner for an extended period for permanent use to an operator. In that case we would accept them, although I am unable at the moment to locate any such case on the Baltimore and Ohio.

"If this does not cover the information you wish, I will be pleased to have your further advice."

Sheet 16 contains the following explanation of the difference in percentage of private companies' coal cars shown in B. & O. Ex. 24, statement 1, and the percentage of private cars shown in statement 6 of the same exhibit: "The difference in these percentages can not be used as a fair comparison, one against the other. Page six deals only with cars actually loaded at mines on the Baltimore & Ohio Railroad on dates given, while the figures on page one include all cars on line, at mines, as well as in transit to and from mines, both loaded and empty, and those running to and from connecting lines upon which the cars are at home." Sheet 17 is a statement concerning car distribution of B. & O. fuel cars in the Wheeling division of the B. & O. for the first 20 days of September, 1922, the number of cars left over, and the causes. Sheet 18 is a similar statement with respect to foreign railroad fuel cars in the Wheeling division for the first 20 days of September, 1922. Sheet 19 is also a similar statement in respect to private cars in the Wheeling division for the first 20 days of September, 1922. The total private cars ordered are shown to be 646; the total cars available, 827; the total cars loaded, 443; cars left over empty, 379; cars left over partly loaded, 4; cars left over account of mine disability, 335; cars left over account of "worked 8 hours," 34; cars left over account of "cars late," 12; and cars left over account "short cars," 1. Sheet 20
3179 is also a similar statement in respect to commercial cars in the Wheeling division for the first 20 days of September, 1922. The commercial cars ordered are shown to be 13,514; cars available, 7,118; cars loaded, 5,979; cars left over empty, 1,008; cars left over partly loaded, 118; cars left over account of mine disability, 291; cars left over account "worked 8 hours," 377; cars left over account "cars late," 266; cars left over account "short cars," 75; and cars left over account "blocked with loads—railroad failure," 117. Sheet 21 is a similar statement as to distribution of B. & O. fuel cars in the Monongah division for the first 20 days of September, 1922. Sheet 22 is a similar statement concerning foreign fuel cars in the Monongah division in the first 20 days of September, 1922. Sheet 23 is a similar statement as to private cars in the Monongah division for the first 20 days of September, 1922. The total cars ordered is shown to be 971; total cars available, 1,279; cars loaded, 770; cars left over empty, 508; cars left over partly loaded, 1; cars left over account "mine disability," 79; cars left over account "worked 8 hours," 296; cars left over account "cars late," 71; cars left over account "blocked with loads—R. R. failure," 63. Sheet 24 is a similar statement in respect to commercial cars in the Monongah division for first 20 days of September, 1922. Total commercial cars ordered are shown to be 25,887; total commercial cars available, 7,554; cars loaded, 6,120; cars left over empty, 1,164; cars left over partly loaded, 249; cars left over account of "mine disability," 251;

account of "worked 8 hours," 190; account of "cars late," 590; account of "short cars," 57; account of "blocked with loads—R. R. failure," 125; account of "holiday," 200. Sheets 25 and 26 are similar statements with respect to cars distributed to the Wheeling Creek mine and Gladys No. 1 mine, respectively, the first 20 days of September, 1922.

Ex. 139 (Tucker): 2-page statement concerning number of men who left Rockport Coal Company during car shortage period June 24, 1920, to July 31, 1920.

3180 Ex. 140 (Tucker): 2-page statement, the first page being signed by Mr. H. L. Tucker, correcting certain statements made while he was on the witness stand with respect to the months in which the railroad company took all or a part of the day's run, agreeing not to count the cars on those days. The statement contains the following: "I stated that this occurred in the months of May, June, July, and August, but, upon examining our records, I find this should have been September and November, 1920."

Ex. 141 (Tucker): 2-page statement signed by Mr. H. L. Tucker supplementing and explaining items in the cost sheet (Ex. 47) which he presented earlier in the hearing.

Ex. 142 (Richardson): 1-page statement showing comparison of costs for mine No. 6 of West Kentucky Coal Company during short running time in December, 1921, as contrasted with costs during full running time in June, 1922. With 63 hours as the number of hours worked in the former month the cost on railroad cars is shown to be 2.5384. And with 208 hours worked in the latter month the cost is shown to be 1.9570.

Ex. 143 (Freeman): 4-page statement of Indiana Coal Traffic Bureau showing cost of producing and marketing coal of Glen Ayr Coal Company, Glen Ayr mine, for months of January, April, July, and October, 1920. The statement shows that with 21,100 tons hoisted in January the cost per ton was $2.019; that with 8,164 tons hoisted in April the cost per ton was $2.642; that with 5,589 tons hoisted in July the cost per ton was $3.389; and that with 25,489 tons hoisted in October the cost per ton was $2.028.

Ex. R-1 (Holt): 2-page blank form of contract for railroad coal.

Ex. R-2 (Holt): 1-page statement showing for Erie Railroad Company by months April to September, 1923, inclusive, tonnage of fuel coal shipped on contracts from mines located off line of Erie Railroad.

Ex. R-3 (Holt): 1-page statement showing empty coal
3181 cars delivered by Erie Railroad to connections to be loaded with Erie fuel on assigned car basis April to September, inclusive, 1923.

3182 Ex. R-4 (Holt): 3-page letter dated April 10, 1923, signed by Mr. J. T. Colbert, general supt., Pittsburg & Shawmut R. R. Co., addressed to Mr. Wm. P. Bartel, director, Bureau of

Service, I. C. C., Washington, D. C., in respect to car distribution practices on that railroad.

Ex. R–5 (Barnes): 1-page statement showing storage coal on hand [on C., B. & Q.] Oct. 1, 1923. The information is shown under the heading "Location" and the heading "Tons on ground." 26 points are shown under the first heading, the minimum being 1,093 tons at O'Neill, Nebr., the maximum being 76,983 tons at W. Burlington, Iowa, and the total being 648,685.

Ex. R–6 (Barnes): 17-page exhibit consisting of 3 certified copies of orders of the Public Utilities Commission of Illinois, dated July 25, 1917, May 13, 1918, and Sept. 3, 1919, with respect to the conveyance by the C., B. & Q. of certain coal lands to the Valier Coal Co., an Illinois corporation.

Ex. R–7 (Collett): Copy of 3-page letter dated Oct. 12, 1923, from Mr. J. H. Doggerel to Mr. J. E. Hutchison, with respect to the practice of the St. Louis-San Francisco R. R. in obtaining its fuel coal on line and off line.

Ex. R–8 (Moynihan): 1-page form of Erie R. R. Cos'. daily report of coal cars delivered to connections for return fuel and loads received 24 hours ending 6 p. m.

Ex. R–9 (Rust): 3-page copy of letter dated May 27, 1920, from Seaboard By-Products Coke Company, ———, president, to I. C. C. the body of which reads as follows:

"The Seaboard By-Product Coke Company owns and operates a by-product coke plant at Jersey City, N. J., and is under contract with the Public Service Gas Company to furnish fourteen million cubic feet of gas per day from this plant. The Public Service Gas Company uses this gas to supply the towns of Jersey City, Newark, Bayonne, and other towns situated in northern New Jersey.

3183 "For some time past it has been increasingly evident that something must be done to obtain a sufficient tonnage of coal to enable the plant of the Seabord By-Product Coke Company to operate continuously. The plant has been operating from hand to mouth, with no assurance where the next day's supply of coal would be procured, it being impossible to lay in a stock. It has been necessary in the past, while the Fuel Administration was functioning, to secure from the coal committee diversion orders to meet the demands.

"Under normal conditions, with a continuous supply of coal, the plant is capable of carbonizing approximately 2,750 tons of coal per day, producing approximately 1,940 tons of coke and more than sufficient gas to meet the contract. In fact, it would be possible to supply to the Public Service Gas Company with a large amount of gas in addition to the 14,000,000 feet called for in the contract if it were possible to secure the coal.

"We can secure sufficient coal under contracts to operate to full capacity if it were possible for the coal companies to make deliveries, but we have been advised by the coal companies that during the coming year they will be unable to load more than one-half

the coal their mines are capable of producing, for the reason that the railroads will be unable to furnish sufficient cars.

"The Pittsburgh Coal Company has on the Baltimore & Ohio Railroad five mines on the branch of said railroad in the vicinity of West Newton, Penna., capable of producing 3,300 tons of run-of-mine coal per day. If this company will agree to give us sufficient coal from these mines to meet our requirements in case we furnish our own cars, and if we could be assured that the cars will be loaded at the mines and delivered to our plant undisturbed, we believe we could arrange to purchase sufficient cars to take care of the above-mentioned production.

"The above-mentioned five mines are the only mines of the Pittsburgh Coal Company located on the West Newton branch of the B. & O. Railroad, and are as follows: Youghslope, Waverly, Shanor, Eureka, and Euclid mines.

"The questions which arise in our minds at this time and which must be determined before we make any arrangement to purchase cars, or to take the entire output of the above-mentioned mines, and which we desire your body to decide, are as follows: Will such private cars, in the distribution of cars, be counted against the coal company from which they are delivered or only against the five mines of said coal company located on the particular branch of the railroad in figuring the distributive share of the coal company of the total available cars. Will any pooling arrangements to be instituted by the Interstate Commerce Commission, under the transportation act, affect such privately owned cars?

"We realize that the Interstate Commerce Commission has broad powers under the transportation act to make or suspend rules or regulations and to make any just and reasonable directions it desires with respect to car service, without regard to ownership, as will best promote the service in the interest of the public, and believe that you can assist us in relieving the situation.

3184 "In regard to public interest in connection with our proposed purchase of approximately 800 cars of 55-ton capacity, and an arrangement with the coal company to furnish the entire output of the five above-mentioned mines, will state as follows:

"Gas can be produced, as it has been produced by this company for the Public Service Company, at a saving of 25 gallons of gas oil per ton of coal coked, inasmuch as if gas is manufactured by the Public Service Company, and if they do not secure gas from this company, it will be necessary for them to use this amount of gas oil.

"The Public Service Company does not have plant capacity to meet its customers' requirements at any time, excepting during the summer months. After September 1st it must rely on the Seaboard By-Product Coke Company for the 14,000,000 cubic feet of gas for which it has contracted with this company, and could use 5,000,000 cubic feet per day in addition, as above stated. Therefore, from September 1st, the general public in the northern part of New Jer-

sey is absolutely dependent upon the gas output of Seaboard By-Product Coke Company, and the Seaboard By-Product Coke Company is a concern furnishing gas directly to a public-utility corporation, upon which said public-utility corporation is absolutely dependent.

"During the war, and up until the time that the Fuel Administration ceased functioning, it was necessary for the Seaboard By-Product Coke Company to rely upon the Government to secure a sufficient supply of coal, and gave us priority over other industries because we were a public utility.

"There seems no question but what an emergency exists which must be remedied in some way, and this company is willing to take care of the emergency by purchasing private coal cars if it can contract for the entire output of the above-mentioned five mines, can be assured that cars will travel loaded from said mines to its plant and return unloaded without being disturbed, and if said supply of private cars furnished the Pittsburgh Coal Company for use at said mines is not counted against the pro rata share of all the mines of the Pittsburgh Coal Company.

"We hope that the Interstate Commerce Commission, in functioning under the transportation act, can see its way clear to remedy the situation which has been above explained, and avoid the possibility of our plant running at less than full capacity or being in the danger of being completely shut down, to the damage of not only ourselves but to the public generally of northern New Jersey.

"Will you kindly answer, if possible, the above questions, in order that we can decide immediately whether or not we can proceed to purchase cars and relieve the possibility of a serious gas shortage."

Ex. R–10 (Rust): 1-page original letter dated June 1, 1920, signed Clyde B. Aitchison, commissioner, addressed to Mr. H. B. Rust, president, Seaboard By-Products Coke Company, Pittsburgh, Pa., and reading as follows:

3185 Referring to your letter of May 27 in which you ask, after stating that you are under contract to furnish gas to the Public Service Gas Company of New Jersey, (a) whether in the event your company invested approximately $2,000,000 in the purchase of 800 coal cars it might have the exclusive use of such cars, and (b) whether under a contract with the Pittsburgh Coal Company to purchase practically the entire output of five of its mines situated on the West Newton branch of the Baltimore & Ohio the private cars would affect the rating of all of the mines of the Pittsburgh Coal Company or only the five mines situated on the West Newton branch of the Baltimore & Ohio?

I find that in the Hillsdale Coal case, 19 I. C. C., 356, the commission held that the owners of private cars were entitled to their exclusive use so long as such cars were counted against the distributive share of the mines to which they were assigned. That decision seems to answer your first question in the affirmative. In the McCaa Coal case, 33 I. C. C., 130, the commission held substantially that

in fixing mine ratings that the mine should be regarded as the unit and not the company that owns the mine, except in cases where one mine had different openings. That decision is understood to mean that where a particular company owns several mines that the rating of each mine must be determined irrespective of the owner and that cars must be assigned to each mine according to the rating determined. Applying the principle of the McCaa case to your second inquiry, the answer is that the private cars as well as other cars assigned to the five mines on the West Newton branch of the Baltimore & Ohio should be counted against the distributive share of those mines irrespective of the ratings of the other mines owned by the Pittsburgh Coal Company.

Ex. R–11 (Rust): 24 sheets containing copies of 21 letters between Seaboard By-Product Coke Company and Debevoise-Anderson Co., during January, February, March, April, May, and June, 1920, concerning the inability of the Seaboard Company to accept or fill orders of certain other companies for foundry coke, domestic coke, and coke for industries. The exhibit also contains copies of two letters dated April 30, 1920, from Lieut. S. L. Bates, U. S. N., to Debevoise-Anderson Co., ordering 20 carloads of Koppers' coke and requesting that 10 carloads be shipped under a previous order.

Ex. R–12 (Farrand): 1-page statement showing number of private coal cars of Public Service Electric Company of New Jersey, and their cost and maintenance, Feb. 1, 1921, to July 31, 1923. The number of cars owned is shown to be 600; the cost of the cars, $1,750,297.97, or an average of $2,917.16. The average age of the cars on Dec. 31, 1921, is shown to be nine months. The total
3186 costs, including repairs, depreciation, retirements, insurance, taxes, interest on investment, and operating expenses are shown to be $206,310.85 from Feb. 1, 1921, to Dec. 31, 1921; $284,537.38 for calendar year 1922; and $171,018.46 for first seven months of 1923. Earnings from mileage payments and total mileage are shown to be, respectively, $77,508.53 and 5,167,230 for 1921 period; $76,951.52 and 5,130,098 for 1922 period; and $81,513.14 and 5,444,221 for 1923 period. The net loss per period and the net loss per ton of coal handled in private cars are shown to be, respectively, $128,802.32 and 32.1¢ for 1921; $207,585.86 and 61¢ for 1922; and $89,505.32 and 21.8¢ for 1923. A note states: "Interest on investment is calculated at 10%—this is what the money cost with which the cars were bought. Depreciation is figured at 2½% per annum which assumes a life of 40 years."

Ex. R–13 (Hutchinson): 1-page statement concerning ownership of private coal cars by Westmoreland Coal Company. The statement shows by years, from 1900 to 1923, the number of cars purchased and the original cost, the total number purchased being 2,019 and the total original cost being $2,449,154.96.

Ex. R–14 (Hutchinson): 1-page statement showing financial results of car operations of Westmoreland Coal Company for 1921, 1922, and first 9 months of 1923. Total revenues for year 1921 are

shown to be $278,756.03; for 1922, $244,249.39; and for first 9 months of 1923, $261,418.87. The total revenues are shown to be for "mileage," except $353.00 in 1922. Total expenses, including repairs, other operating expense, depreciation, insurance, and other expense, are shown to be, for 1921, $535,484.63; for 1922, $418,649.63; and for first 9 months of 1923, $375,353.99. The total net loss and the total loss per ton handled in private cars are shown to be, respectively, $256,728.60 and .18886 for 1921; $174,400.24 and .13392 for 1922; and $113,935.12 and .08546 for first 9 months of 1923.

3187 Ex. R–15 (Belleville): 1-page statement showing for Pittsburgh Plate Glass Company coal shipped from Creighton to Ford City in railroad cars and in Pittsburgh Plate Glass Company cars, by years, from 1920 to Oct. 1, 1923. The statement shows that in 1920, 3,095 tons were thus shipped in railroad cars and 198,574 tons in private cars; in 1921, 82,174 tons in railroad cars and 139,024 tons in private cars; in 1922, 2,685 tons in railroad cars and 101,484 tons in private cars; and for the first 9 months of 1923, 5,746 tons in railroad cars and 130,474 tons in private cars. A note states, "During the year 1920 we also shipped in railroad cars 22,846 tons lake coal on orders of the Fuel Administrator and 16,434 tons sold to the Pennsylvania Railroad system." The statement also shows that in 1921, 9,435 tons of outside coal was purchased for Ford City factory; in 1922, 31,791 tons; and for the first 9 months of 1923, 19,497 tons.

Ex. R–16 (Berwind): 5-page statement showing location of mines at which cars owned by the Berwind-White Coal Mining Company are customarily loaded, tonnage loaded in Berwind-White cars and and in railroad cars, number of private cars owned, original cost and material, and income account covering private-car operations from 1921 to Aug. 31, 1923. Sheet 2 shows that this company has 13 mines located in Clearfield, Somerset, Cambria, and Westmoreland Counties, Penna., on the Penna. R. R., at which its own private cars are customarily loaded and are routed on the same lines of the Penna. R. R. Sheet 3 shows number of tons of 2,240 lbs. loaded in the company's own cars from its own mines in 1921 to be 3,387,368; in 1922, 1,912,804; and first 9 months of 1923, 2,575,579 tons. During this period the gross tons loaded in Berwind private cars from other mines varied from 40,514 in 1921 to 80,903 in the first 9 months of 1923, and the tons loaded in railroad-owned cars from the Berwind mines are shown to be 81,060 in 1921, 48,248 in 1922, and 5,384 in the first 9 months of 1923.

3188 The statement also shows classification of tonnage shipped in the Berwind private cars from Jan. 1, 1921, to Oct. 1, 1923, the total railroad fuel tonnage being 284,870; steamship bunkers, 3,236,731; public utilities, 2,794,452; industrial, 1,421,225; others, 320,071; and total, 8,057,349. A note on this sheet states, "All of the above coal shipped on term or other contracts—no spot sales." Sheet 4 shows the number of private cars owned by this company to be 3,078 and the total original cost of the cars to be $3,203,829. The cars are shown to have been built and purchased from 1902 to 1914. Sheet

5 shows the total revenues from operation of this company's private cars to be for 1921, $720,710.51; for 1922, $442,108.53; and for first 8 months of 1923, $493,762.65; mileage being the source of all revenues. Total expenses, including repairs, depreciation, interest, and other expenses, are shown to be $1,016,843.47 for 1921, $690,218.31 for 1922, and $541,659.71 for first 8 months 1923. The total net loss and the loss per ton handled in private cars are shown, respectively, to be $296,132.96 and .08 for 1921; $248,109.78 and .12½ for 1922; and $47,897.06 and .18 for first 8 months of 1923.

Ex. R–17 (Shick): 1-page statement showing location, capacity, principal equipment, and production of, and investment in, steel plants owned by subsidiary companies of Bethlehem Steel Corporation. The statement shows a total of 7 plants located at Bethlehem, Pa.; Steelton, Pa.; Sparrows Point and Baltimore, Md.; Lebanon and Reading, Pa.; Lackawanna, N. Y.; Johnstown, Pa.; and Coatesville, Pa., with blast furnaces and melting furnaces, including converters, open hearth, electric and puddle at each plant. By-product coke ovens, foundries, rolling mills, and manufacturing departments are shown to be at each plant, except that no by-product coke ovens are shown at the Coatesville plant. Ordnance departments are shown to be at the Bethlehem plant. The total by-product coke
3189 ovens' annual capacity (gross tons) is shown to be 6,700,000; the total annual capacity (gross tons) of melting furnaces, including converters, open hearth, electric, and puddle, 7,650,000; the total annual capacity (gross tons) of finished products, 5,500,000; the average number of employees for the first six months of 1923, 44,980, and the total cost of property, $408,146,826.99.

Ex. R–18 (Shick). 1-page statement showing location, capacity, and production of, and investment in, coal mines owned and operated by subsidiaries of Bethlehem Steel Corporation: 25 tipple mines are shown, 4 at Heilwood on P. R. R., producing neutral coking coal; one at Glenside and one at Mentcle, Pa., on C. & I. R. R., producing neutral coking coal; one each at Richard, Bretz, Lingwood, Masontown, and Burke, W. Va., on B. & O. R. R., producing neutral coking coal; one each at Sabraton, Barrackville, and Dakota, W. Va., on B. & O. R. R., producing high volatile coking and gas coal; two mines at Ellsworth and one each at Cokeburg, Hazel Kirk, Bentleyville, Slickville, and Marianna, Pa., on P. R. R., producing high volatile coking and gas coal; two at Johnstown, Pa., on P. R. R. and B. & O. R. R., producing low volatile coking coal; and one at Wehrum, Pa., on B. R. & P. and P. R. R., producing low volatile coking coal. The approximate annual capacity in gross tons of all mines is shown to be 9,500,000; the annual rate of production in gross tons based on first six months of 1923, 9,003,960; average number of employees per day, based on first six months of 1923, 7,848; and cost of property and plant less depreciation, $68,430,667.64.

Ex. R–19 (Shick): 1-page statement showing coal cars owned or leased under equipment trusts by subsidiaries of Bethlehem Steel

Corporation and investment therein. A total of 3,975 cars is shown, at a cost of $8,049,240.34, divided as follows: 1,150 cars are indicated as B. M. I. X. cars; 1,775 as L. S. X. cars; and 1,050 as U. C. K. I. cars.

Ex. R–20 (Shick): 1-page summary statement concerning steel plants, coal properties, and coal cars of subsidiaries of Bethle-
3190 hem Steel Corporation. The information on this exhibit is taken from Exhibits R–17, 18, and 19, except that total coal consumption of plants is shown to be 11,976,000 gross tons.

Ex. R–21 (Shick): 1-page statement showing total wage earners in bituminous coal industry to be 617,403, and in industries making iron and steel products, 1,585,712.

Ex. R–22 (Buck): 1-page statement showing separately for the 7 plants mentioned in Exhibit R–17 bituminous coal requirements of subsidiaries of Bethlehem Steel Corporation. The total gross tons of coking coal for 12 months are shown to be 8,712,000, of which 3,144,000 is low volatile, 2,184,000 is neutral, and 3,384,000 is high volatile. The total gross tons of gas coal for the 12 months are shown to be 1,998,000; miscellaneous coal, 1,266,000; and grand total, 11,976,000. Of the grand total, "miscellaneous plants," which are exclusive of the 7 referred to, are shown to require 10,000 gross tons of miscellaneous coal, but no coking or gas coal. The Coatesville plant is shown as not requiring coking coal. The other 6 plants are shown to require coking coal (low volatile, neutral, and high volatile) as well as gas and miscellaneous coal, except that the Cambria plant is not shown as requiring neutral coking coal.

Ex. R–23 (Gross): 419-page exhibits showing comparison of time in transit of private cars of Bethlehem Steel Corporation transporting bituminous coal from its mines to its several plants, with record of railroad-system cars transporting basic raw material from point of production to its several principal steel-producing plants. An explanatory statement in the exhibit reads: "The statistics in this volume cover the origin, destination, length of haul, and time in transit of inbound shipments of raw materials to the five plants operated by Bethlehem Steel Corporation, at Bethlehem, Steelton,
3191 Sparrows Point, Lackawanna, and Johnstown. Dates of shipment are taken from carrier's records, either shipping documents or freight bills. Dates of arrival are the dates of actual or constructive placement at the plants. The shipments covered are typical shipments in the months of January, April, July, and October of the years 1920 to 1923, inclusive. Mileages are taken from carrier's distance table tariffs, with tariff authority shown in each case." The "Grand summary for 1923," covering every shipment contained in the exhibit moving in the year 1923, is shown as follows: Total system cars, 2,763; total private cars, 1,947; total system car-miles, 563,261; total private car-miles, 485,342; total system car days, 9,358; total private car days, 7,978; average length of haul of system cars, 203.9; average length of haul of private cars, 249.3; average miles per

day of system cars, 60.2; and average miles per day of private cars, 60.8.

The system cars to the Bethlehem plant are shown to contain iron ore from Philadelphia and Donaghmore, Pa., on the P. & R.; Elizabethport, N. J., on C. N. J.; Claremont Terminal, N. J., and Buffalo, N. Y., on L. V.; fluxing stone from McAfee, N. J., on the L. & H. R.; Myerstown, Annville, and Steelton, Pa., on the P. & R.; and bituminous coal from Consolidated mine No. 86 and Davis, W. Va., on W. M.; Heilwood, Greensburg, and Jamison, Pa., on the P. R. R.; Bethlehem mines Nos. 21 and 22, W. Va., on the M. & K.; Clement, Pa., on the C. & I.; Bethlehem, W. Va., on the B. & O.; and Wehrum, Pa., on the P. R. & P. Private cars to the Bethlehem plant are shown to contain bituminous coal from Heilwood, Ellsworth, Cokeburg, Hazel Kirk, Bentleyville, and Marianna, Pa., on P. R. R.; Masontown, Burke, Sabraton, Dakota, Barrackville, Richard, Bretz, and Kingwood, W. Va., on B. & O.

System cars to the Steelton plant are shown to contain ore from Donaghmore, Pa., on P. & R., and from Erie, Pa.. Sparrows Point, Md., and Buffalo, N. Y., on P. R. R.; Port Covington, Md., on W. M.; and coal from Davis and Consol, W. Va., on W. M.; Jamison, Pleasant Unity, Irwin, Myers, and Johnstown, Pa.,
3192 on the P. R. R.; Bethlehem mines Nos. 21–26, Preston and Annabelle, W. Va., on the B. & O. Private cars to Steelton plant are shown to contain bituminous coal from Heilwood and Ellsworth, Pa., on the P. R. R., and Dakota, Barrackville, Richard, Bretz, Kingwood, Sabraton, Masontown, and Burke, W. Va., on B. & O. R. R.

System cars to Sparrows Point plant are shown to contain limestone from Bittinger, Pa., on W. M. R. R.; ore from Buffalo, N. Y., on P. R. R., and N. Y. C.; and coal from Davis, W. Va., on W. M. R. R. Private cars to the Sparrows Point plant are shown to contain bituminous coal from Richard, Bretz, Kingwood, Sabraton, Masontown, Burke, Dakota, and Barrackville, W. Va., on the B. & O. R. R., and Heilwood, Pa., on P. R. R.

System cars to the Lackawanna plant are shown to contain coal from Wehrum, Pa., on the B. R. & P. R. R., and coke from Johnstown Pa., on P. R. R., and Bethlehem, Pa., on the P. & R. Private cars to the Lackawanna plant are shown to contain bituminous coal from Ellsworth, Cokeburg, Hazel Kirk, Bentleyville, Marianna, and Heilwood, Pa., on P. R. R., and Dakota and Barrackville, W. Va., on B. & O. R. R.

System cars to the Johnstown plant are shown to contain coke from Ellsworth, Pa., on P. R. R.; fluxing stone from Naginey, Pa., on P. R. R.; and iron ore from Ashtabula, Ohio, on P. R. R. Private cars to the Johnstown plant are shown to contain bituminous coal from Slickville, Ellsworth, Cokeburg, Hazel Kirk, Bentleyville, and Marianna, Pa., on P. R. R.

3193 Ex. R–24 (Gross): 4-page statement showing for Allegheny district of American Railway Association the percent-

age of coal car distribution, cars loaded with coal and serviceable locomotives stored, passenger, freight, and switching, and also bituminous coal production in net tons for entire country, from August 1, 1920, to September 29, 1923. The information is shown by weeks except as to serviceable locomotives, which are shown semi-monthly and except that the bituminous coal production in net tons for the entire country for three weeks in August and two weeks in September, 1920, are not shown. A note reads, "Figures as to coal production for entire country from reports of United States Geological Survey—other figures from reports of American Railway Association. The Alleghany district of the American Railway Association includes the following railroads: B. & O., P. & L. E., Buff. & Sus., C. R. R. of N. J., Cumberland & Pennsylvania, Long Island, Pennsylvania system, P. & R., S. I. R. T., Union, and Western Maryland."

From week ending August 7 through December 18, 1920, percentage of car distribution is shown to be less than 100 per cent, the minimum per cent being 61 on August 7 and maximum 95 on December 18; minimum number of cars loaded with coal is shown to be 60,233 for week ending August 7, maximum 70,389 for week ending December 11; minimum serviceable locomotives stored, 29 (13 pass., 10 frt., 6 switching) on October 2, maximum 208 (73 pass., 81 frt., 54 sw'g.) on December 18; and minimum bituminous coal production for entire country in net tons 10,334,000 for week ending August 7, maximum 12,865,000 for week ending December 11. From week ending December 25, 1920, through September 9, 1922, percentage car distribution is shown to be 100 or over; minimum number of cars loaded with coal, 12,728 for week ending April 22, 1922, maximum 61,770 for week ending March 25, 1922; minimum serviceable locomotives stored, 373 (103 pass., 197 frt., 73 sw'g.) on January 1,
3194 1921, maximum 2,487 (174 pass., 1,629 frt., 684 sw'g.) on April 16, 1921; and minimum bituminous coal production for entire country in net tons, 3,500,000 for week ending April 1, 1922, maximum 11,437,000 for week ending March 25, 1922. From week ending September 16, 1922, to week ending June 2, 1923, percentage of car distribution is shown to be less than 100 per cent, the minimum being 39 on December 23, 1922, and maximum 88 on May 26, 1923; the minimum number of cars loaded with coal is shown to be 48,430 for the week ending February 24, 1923, maximum 66,426 for the week ending May 26, 1923; minimum serviceable locomotives stored, 64 (20 pass., 21 frt., 23 sw'g.) on February 17, 1923, maximum 471 (57 pass., 265 frt., 149 sw'g.) on September 16, 1922; and minimum bituminous coal production for entire country in net tons, 9,500,000 for week ending September 16, 1922, maximum 11,389,000 for week ending December 9, 1922. From week ending June 2, 1923, through September 29, 1923, the percentage car supply is shown to be 100 per cent or over, except for last three weeks of June, when it is shown to be from 93 to 95 per cent; minimum number of cars loaded with coal is shown to be 49,981 for week ending July 7, maximum 67,055 for week ending August 25; minimum serviceable locomotives

stored, 131 (23 pass., 91 frt., 17 sw'g.) on June 2, maximum 461 (51 pass., 321 frt., 89 sw'g.) on September 15; and minimum bituminous coal production for entire country in net tons, 8,763,000 for week ending July 7, maximum 11,431,000 for week ending September 22.

Ex. R-25 (Fletcher): 1 sheet reproducing two letters, one dated November 3, 1922, from Mr. M. S. Connors on letterhead of the Hocking Valley Railway Company to Mr. M. J. Gormley, chairman, car service division, A. R. A., Washington, D. C., and the other dated October 24, 1923, from Mr. Connors to Mr. W. S. Bronson, general attorney, Richmond, Va. The first letter states that the Hocking Valley was during October, 1922, following the practice of assigning cars for the protection of its railroad fuel loading at mines located on its own line but counting them against the mine. The second letter reads: "Referring to pages 47, 50, 65, and 66,
3195 regarding the apparent discrepancy between my testimony and the return of the Hocking Valley shown in Exhibit 102, I enclose copy of my letter of November 3rd, 1922, to Mr. Gormley, chairman of the American Railway Association, by which I answered the questions upon which Exhibit 102 was based. In explanation, I would say that in answering the questionnaire I treated our 350 "X" cars as assigned cars without giving any consideration to the Traer rule."

Ex. R-26 (Kerr): 1-page graphic chart showing by weeks from August, 1922, to August, 1923, inclusive, (1) total production per day of bituminous coal in million net tons, (2) percentage of coal car distribution, and (3) percentage of mines idle. The chart shows that, beginning August 12, the total net production per day of bituminous coal was approximately 800,000 tons; at the end of the period shown on the chart, August 11, 1922, the total production amounted to approximately 1,800,000 tons. The peak production was approximately 2,150,000 tons on January 13, 1923. The percentage of coal car distribution is shown to be 82 at the beginning of the period, August 12, 1922, and to reach 100 per cent about July 14, 1923, being above 100 per cent thereafter for the remainder of the period. The minimum percentage is shown to be approxamitely 42, January 1, 1923. The percentage of mines idle is shown to be about 20 at the beginning of the period, August 12, 1922, and 28 at the end of the period, August 11, 1923, the minimum percentage being 3 on November 8, 1922, and the maximum 32 on July 14, 1923.

Ex. R-27 (Perkins): 2-page copy of memorandum dated April 14, 1920, from Mr. C. F. Biggert to Mr. S. D. Snow, law department, reading as follows: "When it was decided to build the by-product ovens at our steel works at South Chicago, it also necessitated more extensive mine development at Benham. We have invested at South Chicago in the by-product coke plant approximately four and one-half million dollars and in mine extensions at Benham one million dollars. This Benham expenditure covers several additions to our power plant, development of a new line, mine tipple, mining equip-

ment, and employes' houses. The percentage of output
3196 these mines used by the company, including the by-produ
ovens, steel-mill requirements, harvester works' requirement
and consumed locally at Benham, Ky., is 74%. This takes in co
that is actually consumed by the company itself. Relative to em
ployes out of employment at the steel works and by-product coke
ovens, the number fluctuates between 500 to 1,000 men, depending
great deal on our ability to provide coal and coke from other source
as you know, at very high cost. At Benham we employed throug
the entire operation an average of about 1,000 men, and, of course
when we have no cars at all, practically the entire force is not work
ing and our operation is limited to the supply of cars furnished fo
the shipment of our product; and, on an average, we would say
there are 300 to 600 men out of employment almost continuously
There is, of course, a very considerable money loss on account of
greatly interrupted operation at Benham, Ky., amounting to many
thousand dollars per day. It is quite impossible to figure the actua
money loss to the company owing to interrupted operation at this
time, when at best there is a shortage of labor supply and good men
will not work when they can not put in their full time. For this
reason we are continually reorganizing our working forces. Our
mines at Benham supply the coal for making coke in our beehive
ovens and the coke is used at our blast furnaces at Chicago and some
of the foundries of the International Harvester Co. Our by-
product coke ovens at our So. Chicago steel works are entirely de-
pendable on the supply of coal furnished from our mines at Benham.
This coal is also used in our gas producers that heat our bar mill
billet furnaces at the steel works, and also shipped to the Harveste
Company plants for melting pig iron in their malleable furnaces
and an eastern coal is absolutely necessary for this purpose on ac-
count of the low sulphur content. Relative to the purchase of these
coal lands, would say that this property was acquired many years
ago, and about the same time purchase was made of the ore lands
so as to work out the steel developments that came on years
3197 later. Development was started about 1910, and, of course, it
necessitated the building of the railroad before shipments
could be made, and the first products were moved out in 1912. We
are giving you this memorandum, as we find it impossible to get the
complete information in the statement handed us by Miss Treib."

Ex. R-28 (Perkins): Marked for identification. This exhibit was
rejected by the commission.

Ex. R-29 (Perkins): 2 pages, one page being copy of letter dated
October 20, 1923, from Mr. G. T. Mitchell, treasurer the Peoples
Gas Light & Coke Company, Chicago, to Wisconsin Steel Company,
Chicago, and the other page being copy of statement referred to in
the letter. The letter reads: "I attach hereto statement showing the
amount of gas sent out to the city of Chicago month by month from
October 1st, 1922, to September 30th, 1923, also showing the amount
of gas we received from you for the same period and a column indi-

ting what percentage of send-out has been your gas. From this
itement you can see how essential your gas is to the city of Chi-
go, and anything which curtails a supply of your gas must
cessarily work a hardship on this community." The statement
ows by months from October, 1922, through September, 1923,
tal gas send-out in M. C. F. for city of Chicago of Peoples Gas
ight & Coke Company, the minimum being 2,224,683 in July, 1923,
id the maximum 2,836,067 in March, 1923. The per cent of send-
it shown as purchased from Wisconsin Steel Company varies from
e minimum of 6.56 in October, 1922, to the maximum of 13.16 in
ily, 1923, the per cent for the entire period being 9.74.

Ex. R-30 (Battle): 1-page statement showing (1) 2,963 new
comotives and 134,636 cars, including 55,575 coal cars, put in
rvice from January 1 to October 1, 1923, and 1,242 locomotives
nd 64,601 cars, including 26,541 coal cars on order October 1, 1923;
2) all freight cars awaiting repairs on January 1, 1923, 216,011,
r 9.5 per cent; on September 1, 1923, 175,327, or 7.7 per cent;
and on October 1, 1923, 151,333, or 6.7 per cent; (3) steam
198 locomotives awainting repairs on January 1, 1923, 15,549, or
24 per cent; on September 1, 1923, 10,517, or 16.5 per cent; and
n October 1, 1923, 9,823, or 15.3 per cent; and (4) tons of railroad
uel (stocks) on November 1, 1921, 11,701,736; on October 1, 1922,
,423,195; and on October 1, 1923, 17,663,448. The information on
he exhibit is shown to have been taken from American Railway
Association, Car Service Division, Progress Report No. 6, of October
2, 1923, except as to fuel stocks 1921 and 1922, which are shown
o be taken from a statement filed of record by respondents after
riginal hearings.

Ex. R-31 (Battle): 8-page exhibit containing statement of com-
pany fuel and other coal transported annually by representative non-
oal producing roads, together with number of open-top cars owned
nd percentage of ownership on line for years 1920, 1921, and 1922.

Ex. R-32 (McKinney): 5-page statement concerning coal-car
upply on New York Central R. R.—Ohio Central lines, Corning,
Drakes, Fultonham, and Kanawha & Michigan districts. The first
heet is a summary of the remaining four, each of which deals with
a separate district. The summary shows that for the first three
months of 1923 the total unassigned cars ordered were 110,035;
unassigned cars furnished, 29,933, or 27.2 per cent; assigned cars
ordered, 21,542; assigned cars furnished, 15,192, or 70.5 per cent;
and total cars ordered, 131,577; total cars furnished, 45,125, or 34.3
per cent. A note states, "While the difference between the commer-
cial car supply and what would result from an equal distribution
of all cars is 7.1 per cent of cars ordered, yet an equal distribution
of all cars placed would have increased the commercial loading 26
per cent."

3199 Ex. R-33 (Lieb): Two photographs of New York Edison
Company's coal storage plant at Edgewater, N. J.; capacity,
175,000 tons.

Ex. R–34 (Addicks): 1 photograph of coal storage of Consolidated Gas Company of New York.

Ex. R–35 (Addicks): 1 photograph of three bridges and main conveyor, Luyster Creek coal storage, September 7, 1923.

Ex. R–36 (Addicks): 1 photograph showing another view of Luyster Creek coal storage area on October 22, 1923.

Ex. R–37 (Rice): 10-page statement of cars required, cars placed, and per cent of requirements placed at bituminous coal mines by weekly periods, March 1, 1920, to October 13, 1923, for Baltimore & Ohio R. R., Pennsylvania R. R., Norfolk & Western R. R., Chesapeake & Ohio R. R., and Louisville & Nashville R. R., being compiled from reports published by car service division, American Railway Association. Statement shows for the B. & O. R. R. that the percentage of cars placed to cars required from week ending March 6, 1920, until the end of that year varied from the minimum of 35 in April to the maximum of 87 in September; that the percentage exceeded 100 throughout the year 1921 and until August 20, 1922, with the exception of 89 per cent for week ending July 22, 1922; that from August 20, 1922, to June 30, 1923, the percentage varied from the minimum of 37 in October and December, 1922, to the maximum of 95 in August, 1922; and that from July 1, 1923, through October 13, 1923, the percentage was in excess of 100. Statement shows for the Pennsylvania R. R. that the percentage of cars placed to cars required from week ending March 6, 1920, to December 11, 1920, was less than 100, except for the week ending November 6, the minimum being 41 and the maximum 96; that from December 12, 1920, to September 9, 1922, the percentage exceeded 100; that from September 10, 1922, to May 26, 1923, the percentage varied from the minimum of 40 in December, 1922, to the maximum of 97 in May, 1923; and that from May 27 through October 13, 1923, the percentage equaled or exceeded 100. The statement shows for
3200 the Norfolk & Western that the percentage of cars placed to cars required from the week ending January 3, 1920, throughout that year was less than 100, except during two weeks in January, four weeks in July, all of August and September, one week in October, one in December, and three weeks in November, the minimum percentage being 46 in May and the maximum (less than 100) 94 in October; that from January 1, 1921, to July 8, 1922, the percentage exceeded 100, except for one week in October and one in November, the percentage then being 93; that from July 9, 1922, through October 13, 1923, the percentage was less than 100, except for the week ending July 7, 1923, when it was 107, the minimum percentage being 44 in December, 1922, and the maximum (under 100) 96 in July, 1923. The statement shows for the Chesapeake & Ohio R. R. the percentage of cars placed to cars required from week ending March 6, 1920, throughout that year to be less than 100, the minimum being 41 in May and the maximum 71 in July, September, and December; that from January 1, 1921, to June 10, 1922, the per-

entage was 100, except for part of October and November, 1921, hen it varied from 81 to 98, and except for part of February, Iarch, April, and May, 1922, when it varied from 96 to 99; that rom July 11, 1922, through October 13, 1923, the percentage varies rom the minimum of 27 in December, 1922, to the maximum of 97 n June, 1922. The statement shows for the Louisville & Nashville he percentage of cars placed to cars required from week ending Iarch 6, 1920, throughout that year to be less than 100, the minimum eing 40 in April and the maximum 90 in December; that from anuary 1, 1921, to April 22, 1922, the percentage was 100, except or nine weeks, when it was 99, and four weeks, when it varied from 7 to 98; that from April 23, 1922, through October 13, 1923, the ercentage was less than 100, the minimum being 21 in September, 922, and the maximum 91 in May, 1922. A note on the exhibit tates that the form of report from which this exhibit is compiled efines "cars required, cars placed, and percentage of weekly require-

3201 ments as follows: (1) Total number of cars required for the week for loading coal to maximum rating of all mines on your line, or to satisfy orders if less than rating; (2) total number cars placed at mines for week (loading coal for all purposes); (3) percentage of weekly requirements (number of cars placed divided by maximum requirements or orders)."

3202 Ex. R–38 (O'Neill): 1-page statement showing car miles per day for the following six railroads for the years 1920, 1921, and 1922, as shown by their operating reports of freight transportation filed with the Interstate Commerce Commission. The name of the carrier and the car miles per day for the years 1920, 1921, and 1922, respectively, are as follows: Pennsylvania R. R., 20.2, 18.8, 19.8; Philadelphia & Reading R. R., 22.7, 17.4, 18.7; Lehigh Valley R. R., 21.9, 20.1, 16.3; Western Maryland R. R., 26.6, 14.4, 14; B. R. & P. Ry., 25.1, 10.4, 12.9; and Louisville & Nashville R. R., 30.7, 25, 27.7.

Ex. R–39 (O'Neill): 1-page statement beginning "In a year when industry is going at full speed," runs the comment of two coal statistical experts, "it now requires about 550,000,000 tons to care for our domestic users of bituminous and to meet present demand for exports (Tryon and McKenney, Coal Age, 1/19/22, p. 85)," and containing the identical table set forth in Exhibit No. 76 as to soft coal consumers in the United States.

Ex. R–40 (O'Neill): 1-page statement entitled "Car distribution from Pennsylvania Railroad records—The Central Pennsylvania Coal Producers' Association, Altoona, Pa.; 1922–1923 car shortage. Eastern and central regions combined. Compiled from C. D.–3." The total cars required, total assigned cars available, total assigned and unassigned cars available, and per cent of assigned cars available to total cars available are shown, respectively, as follows: September, 1922, 188,710.7, 42,147, 165,016.7, 25.54%; October, 1922, 235,778, 50,651 135,669.1, 37.33%; November, 1922, 229,637, 69,348.5,

125,505.1, 55.26%; December, 1922, 238,515, 67,564.2, 116,854.
57.82%; January, 1923, 260,119.5, 79,366.4, 121,857.2, 65.13%; Febru-
ary, 1923, 239,121.9, 61,795, 94,280.2, 65.54%; March, 1923, 260,289.
75,300.1, 115,915.3, 64.96%; April, 1923, 208,741.7, 77,167, 130,
3203 152.4, 59.29%. (a) Commercial distribution—net require-
ments; (b) commercial distribution—charged; and (c) com-
mericial distribution—per cent distribution, are shown, respectively,
as follows: September, 1922, 163,688.6, 117,446.5, 71.75%; October,
1922, 188,310.7, 81,739.7, 43.41%; November, 1922, 162,651.3, 54,994.1,
33.81%; December, 1922, 170,664.6, 47,331.9, 27.73%; January, 1923,
179,519.3, 40,515.5, 22.57%; February, 1923, 171,568.2, 30,429.1,
17.74%; March, 1923 180,747.6, 38,924.8, 21.54%; April, 1923, 138,
825.7, 52,797.1, 38.03%. The statement shows "per cent distribution
'A' all cars" and "per cent increase of commercial distribution" to
be respectively as follows: September, 1922, 87.44, 21.87; October,
1922, 57.54, 32.55; November, 1922, 54.65, 61.64; December, 1922,
48.99, 76.70; January, 1923, 46.85, 107.57; February, 1923, 39.43,
122.27; March, 1923, 44.53, 106.73; April, 1923, 62.35, 63.95. A note
reads: "'A' This column shows the percentage of distribution which
would have been in effect if assigned cars were eliminated."

Ex. R–40–A (O'Neill): 1-page statement showing mine ratings
in South Fork district of the Pennsylvania R. R., by months, from
October, 1922, to April, 1923, inclusive; also the name of each mine
and by whom operated. 86 mines with aggregate ratings of 984.2
cars are shown for October 10, 1922; 719.2, November 10, 1922;
814.3, December 10, 1922; 819.2, January 10, 1923; 861.8, February
10, 1923; 894, March 10, 1923; 899.1, April 10, 1923. 8 mines of the
Berwind-White Coal Mining Company, namely, Eureka Nos. 30, 31,
35, 36, 37, 39, 40, and 42 are included in the mines named.

Ex. R–40–B (O'Neill): 1-page statement showing distribution at
mines on Cresson division of Pennsylvania R. R. from October 10,
1922, to April 30, 1923, inclusive, this information being shown sep-
arately for the Cresson & Irvona branch, Cherry Tree & Dixonville
branch, and Bellwood branch. Railroad fuel cars required, railroad
fuel assigned cars available, railroad fuel unassigned cars available,
per cent railroad fuel cars available to railroad fuel cars re-
3204 quired, and fuel cars loaded are shown, respectively, as follows
for each branch: Cresson & Irvona branch, 3,984.2, 3,179.3,
145.2, 83.5%, 2,685.2; Cherry Tree & Dixonville branch, 1,358.4,
1,609.9, 8.3, 119.1%, 1,100.7; Bellwood Branch, 4,798.6, 4,140.3, 141.2,
89.2%, 3,327.9. Privately owned cars required, privately owned as-
signed cars available, privately owned unassigned cars available, per
cent privately owned cars available to privately owned cars re-
quired, and privately owned cars loaded are shown, respectively, as
follows for each branch: Cresson & Irvona branch, 664.4, 139., 153.3,
44%, 223.5; Cherry Tree & Dixonville branch, 20,593.4, 24,306.2,
939.5, 122.6%, 14,068.6; Bellwood branch, no privately owned cars.
Commercial cars required, commercial assigned cars available (cars

not assigned for railroad fuel but for other reasons not counted against the distributive share of the mines), commercial unassigned cars available, per cent commercial cars available to commercial cars required, and commercial cars loaded are shown, respectively, as follows for each branch: Cresson & Irvona branch, 44,606.2, 1,418.3, 12,667.4, 31.6%, 11,385.1; Cherry Tree & Dixonville branch, 65,414.5, 592.4, 17,182.3, 27.2%, 15,108; Bellwood branch, 31,759.7, 1,592.1, 8,739.5, 32.5%, 7,658.5. The grand totals for the Cresson division are shown to be, cars required, 173,179.4; assigned cars available, 36,980.7; unassigned cars available, 39,977.4; per cent cars available to cars required, 44.4; and cars loaded, 55,557.5.

Ex. R-40-C (O'Neill): 1-page statement showing distribution at mines loading railroad fuel cars on the Cresson division of the Pennsylvania R. R. from October 19, 1922, to April 30, 1923, inclusive.

Ex. R-40-D (O'Neill): 1-page statement showing distribution at mines loading privately owned cars on the Cresson division of the Pennsylvania R. R. from October 19, 1922, to April 30, 1923, inclusive. The companies shown as having mines loading private cars on the Cherry Tree & Dixonville branch are the Barnes Coal Company with one mine, Barnes & Tucker Company with 5 mines,
3205 Bethlehem Mines Corporation with 4 mines, and Pennsylvania C. & C. Corporation with 4 mines. The total requirements of these mines is shown to be 20,593.4; assigned cars available, 24,308.9; unassigned cars available, 939.5; cars loaded, 14,068.6; per cent cars available to cars loaded, 179.5; per cent cars loaded to cars required, 68.3; per cent cars available to cars required, 122.6. The Pennsylvania C. & C. Corporation is shown to have the only mines loading privately owned cars on the Cresson & Irvona branch. The requirements of these mines (4) are shown to be 664.4; the assigned cars available, 139; unassigned cars available, 153.3; cars loaded, 223.5; per cent cars available to cars loaded, 130.8; per cent cars loaded to cars required, 33.6; per cent cars available to cars required, 44.

Ex. R-40-E (O'Neill): 1-page statement showing distribution at mines in South Fork district of the Pennsylvania Railroad from October 19, 1922, to April 30, 1923, inclusive. This statement shows as to railroad fuel cars that the total cars required was 15,119.1; assigned cars available, 11,955.5; unassigned cars available, 510.2; cars loaded, 11,442.5; per cent cars available to cars loaded, 108.94; per cent cars loaded to cars required, 75.68; per cent cars available to cars required, 82.45. Statement shows as to privately owned cars that the total cars required was 30,297.6; assigned cars available, 36,023; unassigned cars available, 242.4; cars loaded, 25,005.4; per cent cars available to cars loaded, 145.03; per cent cars loaded to cars required, 82.53; per cent cars available to cars required, 119.70. Statement shows (a) as to commercial cars and (b) as to all cars,

respectively, that the total cars required was 87,117.9 and 132,534.
assigned cars available, 3,286.9 and 51,265.4; unassigned cars avai
able, 23,778.7 and 24,531.3; cars loaded, 25,158.2 and 61,606.1; p
cent cars available to cars loaded, 107.58 and 123.03; per cent ca
loaded to cars required, 28.88 and 46.48; per cent cars availabl
3206 to cars required 31.07 and 57.19. The 3,286.9 assigned comme
cial cars available are explained by a note as including "ca
not assigned for railroad fuel but eliminated for other reasons fro
the cars distributed for commercial loading."

Ex. R–40–F (O'Neill): 1-page statement showing distribution
mines loading railroad fuel cars in the South Fork district of th
Pennsylvania R. R. from October, 1922, to April 30, 1923, inclusiv

Ex. R–40–G (O'Neill): 1-page statement showing distribution
mines loading privately owned cars in South Fork district of th
Pennsylvania R. R. from October 19, 1922, to April 30, 1923, inclu
sive. This statement shows six companies having 19 mines loadin
privately owned cars in the South Fork district, including Berwin
White Coal Mining Company and its Eureka mines Nos. 30, 31, 3
36, 37, 39, 40, and 42. The requirements of these 19 mines a
shown to be 30,297.6; assigned cars available, 36,023; unassigne
cars available, 242.4; cars loaded, 25,005.4; per cent cars availabl
to cars loaded, 145.03; per cent cars loaded to cars required, 82.5
per cent cars available to cars required, 119.70. A note referrin
to the mines of the Pennsylvania Coal & Coke Corporation show
on the statement reads: "Privately owned cars during the month o
April, 1923, only." Another note refers to the mines of the Shad
Coal Mining Corporation, the Reitz Coal Company, and the Loya
hanna Coal & Coke Corporation as shown on the statement an
reads: "Loaded into privately owned cars of the Berwind-Whit
Coal Mining Company for a number of days during the perio
October 19th–31st, 1922."

3207 Ex. R–41 (Boyd): 6 sheets, the first 4 being copy of resolu
tion dated Sept. 1, 1923, of Harlan County Coal Operators
Association, Harlan, Ky., with respect to coal car supply at unas
signed and assigned mines in Harlan County served by the Louis
ville & Nashville R. R. Co., and the last two sheets being 2 table
accompanying the resolution. The resolution recites that mines i
Harlan County depending entirely upon unassigned system coal ca
were unable to supply their mines on an average more than 4 or
days each week ending Aug. 18 and Aug. 25, 1923, by reason of thei
failure to receive "adequate transportation," while other mine
located in the same coal field using assigned cars, consisting of pri
vate cars, were furnished with adequate transportation; that fo
week ending Aug. 18, 1923, the mines using unassigned cars wer
entitled to order 5,049 cars, ordered 3,722.1, were furnished 2,642, o
70%; that for week ending Aug. 25, 1923, these mines were entitle
to order 5,049, ordered 3,706, were furnished 2,787.7, or 75%; tha
there were no mines using assigned cars for railroad fuel; that mine

using assigned private cars, namely, United States Coal & Coke Co., Wisconsin Steel Company, Fordson Coal Company, and Melcroft Coal Co., for week ending Aug. 18, 1923, received 100% supply, except Fordson Coal Company, which received 63%; that these assigned car mines for week ending Aug. 25 received from 96 to 99% supply except Fordson Coal Company, which received 90% supply; that the report of the American Railway Association conference committee with the United States Coal Commission, dated June 1, 1923, describes "coal car shortages" under the heading "Extent to which 'coal car shortages' occur, how they vary, and causes that produce them"; that this report was signed by officials of L. & N. R. R.; that Harlan County Coal Operators' Association concurs in the conclusions as outlined in this report to the extent that "transportation shortage" is the greatest contributing cause of a "coal car shortage"; that members of the association believe that due to market conditions and comparatively light demand for
3208 coal during the period August 13 to August 25, incl., there has been in possession of the carriers as a whole a sufficient number of coal cars to fill all of the orders placed for coal cars; that it is undoubtedly a fact that the movement of private coal cars of the four companies named, both loaded and empty, have been greatly expedited and given preferential handling by carriers over the unassigned system coal cars of the L. & N. R. R. Co. and other carriers, upon which coal cars the members of the association have to depend, and that it is therefore resolved that the traffic manager be directed to bring the matter to the attention of the Interstate Commerce Commission in order that it may be given consideration in connection with petitions filed by owners of private cars for further hearing and argument and modification of the commission's order as it affects privately owned cars in Docket No. 12530. The resolution further states that statements are attached showing car rating of commercial and industrial mines as well as transportation furnished each group of mines in the Harlan field from Aug., 1922, to July, 1923, and that these show the *the* industrial mines are rated 22% of the field rating and received 38% of the transportation in the field. The resolution is signed E. R. Clayton, secy. The first table attached shows the average daily rating of commercial mines for period August, 1922, through July, 1923, to be 977.7 cars and the average daily rating of industrial mines 284.6. The second table shows by months during the same period the cars supplied mines, commercial and industrial, in the Harlan County coal field by the L. & N. R. R. The total number of cars supplied to commercial mines in these 12 months is shown to be 87,571.8; the total number of privately owned cars supplied, 51,712.4, 62% of the total number of cars supplied the Harlan field being for commercial mines and 38% for industrial mines. The statement also shows for each month beginning Aug., 1922, that the per cent of cars supplied commercial

mines based on order and the per cent of private cars supplied
3209 based on order were, respectively: Aug., 17, 18; September, 22, 35; October, 26, 35; November, 21, 67; December, 28, 50; January, 1923, 23, 67; February, 21, 38; March, 27, 80; April 36, 92; May, 44, 88; June, 34, 87; and July, 93, 98.

Ex. R–42 (Boyd): 1-page statement entitled "Extract from report of American Railway Association conference committee with United States Coal Commission, dated June 1, 1923, signed by J. E. Roberts, chairman of committee, and 33 representatives of the carriers, members of the committee, including G. E. Evans, vice president (operation); A. R. Smith, vice president (traffic); and W. A. Northcutt, general solicitor, Louisville & Nashville R. R. Co.," the extract being as follows:

"VII. Extent to which 'coal car shortages' occur, how they vary, and causes that produce them. 'Coal car shortage,' while a term generally used, is commonly a misnomer; 'transportation shortage' would be more exact or more properly descriptive. From the viewpoint of the mine management a 'car shortage' exists when cars are not placed on mine tracks in sufficient quantity to fill car orders. From the viewpoint of the railroad management the situation may rather be considered a 'transportation shortage,' for at such a time there may exist no 'car shortage' on the railroad as a whole; that is, even though all car orders are not filled, there may be in the road's possession as many coal cars in the aggregate as in previous periods when the mines it served loaded a greater amount of coal, and the needs of such mines for cars were more adequately or fully met. When labor disturbances cause abnormal demands for coal to be delivered in certain sections of the country within a certain period, the coal moves to meet these demands via routes and gateways in quantities far above the normal or average movement through such channels and also via unusual routes. Because of this abnormal coal movement yard tracks, main tracks, terminals, lake and tidewater piers, and various other facilities become overtaxed or congested, with a consequent slower movement and longer turn-around of cars.

This results in what the mine management terms a 'car short-
3210 age.' The situation may be visualized by comparison with a busy theater district at performance time, when abnormal traffic is moving toward one general destination. There are the same problems of moving an abnormal special traffic to its destination under a time limit, of unloading this special traffic, of getting the unloaded vehicles out of the congested area, out of the way of the loaded cars coming in, and perhaps back for another load, and of keeping the normal traffic moving through the congested area at the same time. The results of the theater rush are that traffic immediately moves more slowly, street car schedules and service are inadequate, congestions occur, and the public is not adequately or expeditiously served. When the pressure to move to one destination dis-

appears orderly and normal movement returns, delays are eliminated, and normal service is restored."

3211 Ex. R–43 (Boyd): 4-page statement compiled from official records of the Louisville & Nashville Railroad Company showing coal car supply at mines in Harlan County, Ky., using assigned coal cars of private ownership compared with coal car supply at mines which are furnished unassigned railroad system coal cars, by months, from March 1, through September, 1923. The statement shows separately for Fordson Coal Co., No. 1, Fordson Coal Co. No. 2, Wisconsin Steel Company, United States Coal & Coke Company; Melcroft Coal Co., Coxton; Melcroft Coal Co., Kayu; for the six assigned private car companies as a whole, and for unassigned system car companies as a whole, the number of cars entitled to order, number ordered, number supplied, and percentage furnished of cars ordered. The daily mine rating of Fordson Coal Co. No. 1, is shown to be 30.7 cars and of Fordson Coal Co. No. 2, 30.3 cars for March and April, 1923, and 31 cars each thereafter throughout the period. The daily mine rating of the Wisconsin Steel Company is shown to be 65.3 cars in March, 1923, 65.5 cars in April, 1923, and 55 cars for each month thereafter; the daily mine rating of the United States Coal & Coke Company is shown to be 120 cars throughout the period; the daily mine rating of the Melcroft Coal Co., Coxton mine, is shown to be 12.2 cars in March and April, 1923, and 11.7 cars each month thereafter, except September, when it was 13. The daily mine rating of the Melcroft Coal Co., Kayu mine, is shown to be 11.6 cars in March and April, 1923, and 11.4 cars each month thereafter, except September, when it was shown to be 12. For March, 1923, the total assigned private cars supplied are shown to be 6,203.1 or 85.09% of such cars ordered, the car supply on development basis, 155.8 or 96.89% of such cars ordered; the unassigned system cars supplied, 5,876.1, or 27.27% of such cars ordered, and the total number of cars supplied, 12,235, or 42.20% of total cars ordered; for April, 1923, the assigned private cars supplied are shown to be 6,298.3, or 94.70%, unassigned system cars 7,314.4, or 36.33%, and total cars sup-
3212 plied 13,612.7, or 50.82%; for May, 1923, assigned private cars supplied, 6,383.4, or 90.42%, unassigned system cars supplied, 8,659.3, or 44.37%, total cars supplied, 15,042.7, or 56.64%; for June, 1923, assigned private cars supplied, 5,964.5, or 89.86%, unassigned system cars supplied, 9,402.2, or 51.83%, and total cars supplied, 15,366.7, or 62.01%; for July, 1923, assigned private cars supplied, 5,725.7, or 100.41%, unassigned system cars supplied, 12,184.9, or 93.63%, and total cars supplied, 17,910.6, or 95.70%; for August, 1923, assigned private cars supplied, 6,331.2, or 93.44%, unassigned system cars supplied, 11,729.1, or 74.40%, and total cars supplied, 18,060.3, or 80.13%; and for September, 1923, assigned private cars supplied, 5,973.9, or 97.47%, unassigned system cars supplied, 11,041.2, or 66.43%, and total cars supplied, 17,015.1, or 74.80%, the per cent in each case being per cent of cars supplied to cars ordered. Note 1

reads "The 'rated' capacity of the 6 mines using privately owned assigned cars was 24.7% of the 'rated' capacity of all of the 73 mines in Harlan County, and these 6 mines received 50.7% of the number of coal cars placed at all the mines during the month of March, 1923. If the mines furnished with only unassigned system coal cars had been given their pro rata share of the number of coal cars actually placed in this Harlan district, they would have received 9,091 cars instead of 5,876 cars which they did receive; an increase of 54.7%, or 3,215 more cars, as their rated capacity and orders placed for cars entitled them to 74.3% of the cars to be distributed." A recapitulation on the last page of the exhibit sets forth in tabular form information similar to that contained in this note for each of the 7 months from March through September, 1923.

Exhibit R–44 (Boyd): 1-page statement compiled from official monthly reports of the Louisville & Nashville R. R. Co., showing the coal car supply at all mines on the L. & N. R. R. Co. and short line connections which are furnished unassigned system coal cars, and a comparison of the supply at mines on the Cumberland
3213 Valley division (on which the Harlan County mines are located) with the entire system, April 1, 1922, to September 30, 1923. The first page shows for each month from April, 1922, through September, 1923, that (a) the number of cars furnished all mines on Louisville & Nashville R. R. system using unassigned cars; (b) the percentage of orders filled in furnishing such cars; (c) the number of cars furnished all mines on Cumberland Valley Division, L. & N. R. R., using unassigned cars; and (d) the percentage of orders filled in furnishing such cars were, respectively, as follows: April, 55,849.5, 96.2%, and 15,967.5, 98.2%; May, 69,497.2, 87.8%, and 21,553.3, 79.9%; June, 68,424.5, 81.4%, and 20,943.3, 67.6%; July, 36,841, 39.3%, and 6,370.3, 19%; August, 35,935.9, 30.5%, and 7,096.6, 17%; September, 27,254.9, 20.3%, and 8,800.8, 19.1%; October, 34,073.7, 24.4%, and 12,161.8, 24.7%; November, 34,381.8, 24.8%, and 10,449.7, 21%; December, 33,136.6, 24.6%, and 12,647.4, 28.7%; January, 1923, 36,356.4, 23.5%, and 11,872.2, 23.6%; February, 29,864.3, 21.9%, and 9,195.7, 21.6%; March, 32,241.5, 33.2%, and 9,636, 27.4%; April, 32,867.1, 39.8%, and 11,543.2, 35.2%; May, 38,964.1, 50.4%, and 13,702, 45.8%; June, 38,416.4, 57.2%, and 14,145.6, 52.2%; July, 45,851.1, 84.4%, and 17,144.7, 93.3%; August, 48,780.9, 80.2%, and 16,450, 75.3%; and September, 43,878.8, 65.1%, and 16,313.6, 66.4%. A note for April, May, and June, 1922, states "Strike of United Mine Workers in central competitive fields." A note for July and August, 1922, states "Strike of United Mine Workers in central competitive fields and railroad shopmen."

Ex. R–45 (Boyd): One-page statement showing, by divisions, cumulative coal car supply at mines served by the L. & N. R. R. for period April, 1922, through September, 1923. The figures shown do not include assigned cars for railroad fuel, and privately owned cars of the United States Coal & Coke Co., Melcroft Coal Co., Wisconsin

Steel Co., and Fordson Coal Co. The balance on September 31, 1923, of each division is shown to be as follows: Kentucky, 629.4 short; eastern Kentucky, 16,974.3 short; Knoxville, 1,061 over; Cumberland Valley, 24,603.6 short; Henderson, 8,381.5 over; St. Louis, 3,480.5 over; O. & N., 3,343.7 over; and Alabama, 25,940.6 over.

3214 Ex. R–46 (Boyd): One-page statement showing as to 16 shipments of coal from the mines of the Harlan Cooperative Coal Company, Evarts, Ky., to the By-Products Coke Corporation, South Chicago, Ill., the date of shipment, the car initials (L. & N.), and the numbers of the cars in which the shipments were made.

Ex. R–47 (Boyd): One-page statement entitled "Statement showing that during the month of March, 1923, the coal mines in the Harlan district (C. V. division, L. & N. R. R.) using assigned private coal cars handled a larger number of cars of coal than their distributive share of the maximum capacity of the Cumberland Valley division of 900 cars daily (or 27,000 cars per month), which estimated capacity is not less than actual, as 21,654 cars of coal is the largest number of cars ever handled in any month and this was handled during May, 1922." The statement shows that the number of cars ordered during March, 1923, based on mine ratings or orders if less, by mines on the Cumberland Valley division of the L. & N. R. R. using unassigned system cars, was 35,236.7. The distributive share of these mines is shown to be 23,118 cars, or 82.86 per cent. The mines of the Fordson Coal Company, Wisconsin Steel Company, U. S. Coal & Coke Company, and Melcroft Coal Company, all using assigned private cars, are shown to have ordered during March, 1923 (based on mine ratings or orders if less), 7,200 cars and the distributive share of these mines is shown to be 4,782 cars, or 17.14 per cent. A note states "From the above it will be seen that the owners of assigned private coal cars were entitled to 17.14 per cent of the maximum capacity of the Cumberland Valley division, or 4,782 cars, while they actually shipped 5,873.2 cars, or 1,091 more than their share."

3215 Ex. R–48 (Hammond): One-page statement showing cars ordered, cars supplied, per cent cars furnished, and days cars furnished at mines of the White Star Coal Company, Harlan County, Ky., using unassigned system coal cars by months from July, 1922, through March, 1923. The total cars ordered for the nine months are shown to be 7,785.3; the total cars supplied, 1,862.3; the per cent cars furnished, 23.92; and days furnished, 54.

Ex. R–49 (Hammond): One-page statement showing a comparison of the coal car supply at mines in Harlan County using private cars with the coal car supply at the mines of the White Star Coal Company using unassigned system cars for the month of March, 1923, the per cent of cars supplied to the private car mines being 85.09 and the per cent of system unassigned cars supplied the White Star Company being 24 86.

Ex. R–50 (Boyd): This exhibit was not received in evidence, but was marked merely for identification.

Ex. R–51 (Yarborough): Three-page statement showing for the New River, Kanawha, Coal River, Logan, and Kentucky districts of the Chesapeake & Ohio Railway the number of cars ordered, the number supplied, and the percentage of supply in January, February, and March, 1923. The first page shows this information for assigned and unassigned cars together, the second page for assigned cars, and the third page for unassigned cars. The totals for the divisions for the three months are shown to be 400,417.4 cars (assigned and unassigned) ordered, 141,604.4 cars (assigned and unassigned) supplied, and 35.3 percentage of supply. The total assigned cars ordered for the three months is shown to be 35,244.2, the cars supplied 30,918.4, and the percentage of supply 87.7. The total unassigned cars ordered are shown to be 365,173.2, the total supplied 110,686, and the percentage of supply, 30.3. The increase in percentage from 30.3, the percentage of supply of unassigned cars, to 35.3, the percentage of supply of all cars, is shown to equal 16.5%.

3216 Ex. R–52 (Gutheim): 1-page statement showing the total quantity of coke, in net tons, produced in the United States from 1880 to 1922, the quantity of by-product coke and beehive coke being shown separately and the per cent of each to the total. No by-product coke is shown until 1893, the production then being 12,850 net tons, or 0.1% of the total coke production. The maximum production of by-product coke from 1900 through 1922 is shown to be 30,833,951 tons in 1920, which was shown to be 59.5% of the total coke production for that year. The by-product coke production in 1921 is shown to be 19,750,000 tons, or 78.1% of the total, and in 1922, 28,551,000 tons, or 77% of the total. The maximum coke production (by-product and beehive coke combined) from 1893 through 1922 is shown to be 56,478,185 tons in 1918.

Ex. R–53 (Bronson): 36-page exhibit entitled, "Information Requested by Interstate Commerce Commission, Docket No. 12530." The statement contains in separate sheets replies of various railroads to the following telegram dated October 29, 1923, at Washington, and signed M. J. Gormley: "At hearing assigned-car case here to-day, Commissioner Aitchison requested all roads using assigned cars to report at once whether on days when assigned cars do not equal mines' pro rata share the mine is supply with unassigned cars to make up the deficiency Please wire not later than to-morrow your practice in this respect. This to cover mines using privately owned cars, mines using foreign railway cars for fuel purposes, and mines using system cars assigned for company's own fuel When assigned cars either class are used do you equalize in any manner?" Baltimore and Ohio Railroad replied: "Under our rules we do not during periods of percentage distribution furnish cars for home or foreign railroad fuel loading on assigned basis to any mine unless output is

contracted for that loading for period of not less than six
3217 months. When so contracted it is given only its assigned cars and is not permitted to ship commercial coal. In case of privately owned cars if number of such cars available at mine on any day does not equal its pro rata share it is entitled to sufficient additional unassigned cars to make up its pro rata share." Bessemer and Lake Erie R. R. Co. replied: "When assigned cars do not equal mines' pro rata share unassigned cars are furnished to make up deficiency." Buffalo, Rochester and Pittsburgh Railway replied: "On days when assigned cars do not equal mines' pro rata share shortage is made up with unassigned cars if additional cars desired. But few operations, if any, forward entire output in privately owned cars, in foreign railway cars with fuel for owners, or in system assigned cars. In case of surplus or shortage we equalize at end of week so that each mine will receive its pro rata share of the cars available." Carolina, Clinchfield and Ohio Ry. replied: "On days when assigned cars do not equalize mines' pro rata share such mine is not supplied with unassigned cars. Mines using assigned cars are eliminated from mine rating sheet when assigned cars are used and entire output of mine is taken for railroad fuel. We only use assigned cars during periods of car shortage and have only used assigned cars for fuel this company and Southern Railway." Chesapeake and Ohio Ry. replied: "On Cando mines using privately owned cars and cars furnished by other lines for fuel purposes are supplied unassigned cars when the assigned cars do not equal the mines' pro rata share of available equipment. Our company owned mines and our entire output contract fuel mines are not rated and not given any cars except such as we desire loaded for our fuel purposes. These mines are operated according our fuel requirements." Chicago and Alton Railroad replied: "Distribution assigned and unassigned cars mines this company distributed in accordance C. S. thirty-one. Therefore our answer both your questions, yes." Chicago and Eastern Illinois Ry. replied: "On days when assigned cars do not equal mines' pro rata share such mines are
furnished with unassigned cars to make up deficiency pro-
3218 viding total time worked by such mines during month does not exceed average."

Chicago and North Western Ry. replied: "Northwestern buys no company coal from mines off its own line. When our fuel requirements make it imperative we assign system cars to company mines in preference to commercial mines. Deficiencies to commercial mines are made up. There are no privately owned cars furnished mines on Northwestern road. Foreign cars are assigned for Northwestern fuel only in extreme emergency." Chicago, Burlington and Quincy R. R. replied: "Practice during periods car shortage governed by rules six to eleven, inclusive, car service rules listed in CS thirty-one. No equalization of assigned cars except as provided in

rules ten and eleven. Burlington's Valier mine given full car s
ply when operating." Chicago, Milwaukee and St. Paul Ry. repli
"On days when assigned gondolas do not equal pro rata share mi
are supplied with additional unassigned cars to give them their
rata share when car-supply conditions permit." Chicago, Rock Isl
and Pacific Railway replied: "While our coal loading comparativ
light compared with bit. coal loading lines we are furnishing
assigned cars except for our company fuel. We endeavor make
deficiency with unassigned cars for commercial loading, seeing
mines furnished with equal supply cars based on their rating. W
are not handling any privately owned cars assigned to mine
Colorado & Southern Ry. replied: "Rule twelve of working-ho
rules effective on Colorado and Southern reads as follows, quote ca
assigned for loading railroad fuel must be placed at mines whe
such fuel is to be loaded regardless of the number of hours operate
the hours worked shall be charged against such mine and inequal
ties equalized in the distribution of cars for loading commerci
coal as provided in rule one end quote; this applies to cars deliver
for foreign engine coal loading as well as cars used for system engi
fuel loading. No privately owned coal cars in this territory." De
ver and Rio Grande Western R. R. replied: We distribute mi
empties under working hour equalization rules. Assigned car ru
reading as follows, cars assigned for loading railroad fu
3219 must be placed at mines where such fuel is to be loaded, regard
less of the number of hours operated. The hours worked sha
be charged against such mine and inequalities equalized in the di
tribution of cars for loading commercial coal as provided in rule on
end quote. Foreign empties for foreign fuel loading treated sam
basis as system cars for system fuel loading. No privately own
coal cars this territory." Erie Railroad replied: "All assigned ca
on Erie are Erie cars for Erie supply coal. Erie equipment avai
able is assigned for Erie fuel loading up to requirements. Our com
mercial bituminous loading amounts to less than six per cent tot
and practically all comes from mines not loading Erie fuel." Hun
ington and Broad Top Mountain R. R. replied: "Our practice o
days assigned cars do not equal mines pro rata share mine is entitle
to unassigned cars to make up deficiency." Illinois Central Railroa
replied: "Mines loading privately owned and foreign railway a
signed cars for fuel purposes. One on day when such cars do no
equal mines pro rata received unassigned cars to make up the de
ficiency. Two on days when such assigned cars exceeds the mine
pro rata share no unassigned cars are furnished and cars ordere
and furnished that day are eliminated. Three it is our practice t
assign system cars for company fuel only when taking entire outpu
for period thirty days or more." Interstate R. R. replied: "W
have had no experience in past with any private assigned cars. As
signed railroad cars are placed for loading at designated mines, an

if not sufficient to make up mines pro rata share and commercial cars are available they are placed along with assigned cars." Louisville and Nashville Railroad Company replied: "It is not the practice of the L. & N. Railroad to furnish unassigned cars when the assigned cars do not equal the mines' pro rata share under the conditions as outlined in your telegram." Kansas City Southern Railway replied: "We have no assigned cars in coal mine service except system dumps for company's own fuel. Such cars loaded count against mines' pro rata share in event not sufficient to fill quota other cars supplied."

3220 Missouri-Illinois Railroad replied: "On days when assigned cars do not equal mine pro rata share it is our practice to supply the mine with unassigned cars to make up deficiency. When assigned cars either class used we equalize." Monongahela Ry. Co. replied: "This company owns no freight equipment and consequently can not assign cars for its own fuel. During the car shortage last winter we assigned privately owned cars to mines designated by owners but if those cars did not equal the mines pro rata share the deficiency was made up out of the general supply. During that shortage we accepted cars of railroad ownership for loading fuel of the owners and assigning them to specific mines whose entire output was contracted by the railroad owning the equipment. Those mines were withdrawn from the general distribution and any deficiency in assigned cars below pro rata of the particular mine was not made up. Since the close of the car shortage period we have accepted assigned cars of both private and railroad ownership but on any day in which there was a deficiency of such cars we have given the mines to which these cars were assigned their full pro rata share out of the general distribution of unassigned cars. For your information we have been placing hundred per cent of orders except in case of wreck or other temporary disability ever since the termination of the car shortage last spring." Montour Railroad Company replied: "This company does not provide any coal mines with a preferential supply of cars for the loading of railroad fuel which is the practice generally known as assigning cars for railroad fuel. This company does, however, place privately owned cars at mines designated by car owners. If cars so placed equal or exceed the distributive share of railroad owned cars to which the mine at which placed is entitled in any current week, that mine will be entitled to no additional railroad owned cars for that week. If the privately owned cars so placed do not equal the distributive share to which mine is entitled for that week, then that mine shall be entitled to additional railroad owned cars so that the aggregate placement will equal the distributive share." New York Central Lines

3221 replied: "In case assigned railroad coalers available do not meet mines full output requirement other railroad cars are not furnished mines on New York Central lines as substitue for such

shortage of assigned cars. Only available assigned cars are plac at such mines in such cases. Pittsburgh and Lake Erie is on one of New York Central lines which has occasion to use private owned coal cars but they have never been in position where nece sary to provide other cars because of shortage of privately owne cars. Mines loading company fuel on assigned basis receive on New York Central lines equipment, foreign cars are never subst tuted for fuel loading at such mines." Norfolk & Western R replied: "The Norfolk and Western does not serve mines with pr vate cars. No foreign railroad cars are sent on to Norfolk an Western for owners fuel. The only cars assigned for home fu supply are those cars placed at mines owned by Norfolk and Weste Railway or at mines whose entire output is contracted to Norfol and Western Railway for its locomotive fuel." Pennsylvania Rai road replied: "On days when assigned cars do not equal mines pr rata share, Penna Railroad System supplies mine with un-assigne cars to make up deficiency. This in accordance with rule 22 o distribution rules, reading: Quote. If the number of assigned ca placed at a mine during any period, as provided in rule 20, is le than its pro rata share, bases on revised percentage, it shall be e titled to receive un-assigned cars in addition thereto to make up i pro rata share. End quote. With respect to equalization, our com pany operates under rule 23 our distribution rules, reading: Quot If a mine receives more or less cars than it is entitled to during an period, as provided in rule 18, and after eliminating assigned ca as provided in rule 21, it will, be charged with a surplus or credite with a shortage accordingly, and the discrepancy adjusted promptly as practicable. End quote. Peoria and Pekin Union R replied: "Peoria Pekin Union has certain system coal cars assigne to local mines for company fuel. When sufficient such system ca not available deficiency in mine pro rata share is made up wi unassigned cars."

3222 Pittsburg and Shawmut R. R. replied: "On days wh assigned cars do not equal mines pro rata share we do supp the mine with available unassigned cars to make up the deficien subject however to our equalication rule. On days when assigne cars equal or exceed the mines pro rata share the mine is not give any unassigned cars. Mines on this road do not load private owned cars. When mines are assigned foreign railway cars f railway fuel purposes or system cars are assigned for companies ow fuel the distribution is equalized." Pittsburgh and West Virgin Ry. replied: "We are not handling assigned cars at present. Whe we do handle assigned cars we equalize with unassigned cars to mak up any deficiency when assigned cars do not equal mines pro ra share." Southern Railway System replied: "(1) On days whe assigned cars do not equal mines pro rata share the mine is supplie with unassigned cars to make up the deficiency. This covers min

using privately owned cars, mines using foreign railway cars for fuel purposes and mines using system cars assigned for company's own fuel. (2) When assigned cars of either class are used we do not undertake to equalize a deficiency that may exist at a mine which does not receive assigned cars although if we have a surplus of coal cars we would work to that end." Wabash Railway replied: "Assigned cars furnished to mines on Wabash are counted against their rating and such mines are only given pro rata share of unassigned cars when necessary to equalize. This figured on weekly basis." Wheeling and Lake Erie R. R. replied: "Wheeling Railway supplies sufficient unassigned cars to equal district percentage on days when there are not sufficient assigned railroad or private line cars to give assigned mines the required percentage."

Statement showing, for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deduced potential capacity, by weeks, for calendar year 1922

[Page No. 1.]

[I. C. C. Dockets No. 12530. October 30, 1923]

1922, week ending—	1 Cars required	2 Cars furnished	3 % cars furn. to cars req.	4 Cars loaded	5 Approximate tonnage produced in cars loaded on 50-ton basis	6 Tonnage for which cars ordered on 50-ton basis	7 Per cent of full time worked by all mines entire United States	8 Total bituminous coal production entire United States	9 Potential production entire United States	10 Approximate tonnage produced and not shipped from mine by railroad
January	174,590	243,119	139	138,396	6,920,000	8,730,000	47.0	7,476,000	15,906,000	556,000
14	196,184	267,848	137	153,770	7,689,000	9,809,000	46.2	8,302,000	17,970,000	613,000
21	204,871	278,865	136	163,134	8,157,000	10,244,000	48.8	8,782,000	17,996,000	625,000
28	220,787	277,527	126	179,127	8,956,000	11,039,000	53.5	9,615,000	17,792,000	659,000
February 4	224,635	280,083	125	180,567	9,028,000	11,232,000	54.0	9,714,000	17,989,000	686,000
11	233,547	291,002	125	191,808	9,590,000	11,677,000	57.4	10,309,000	17,960,000	719,000
18	237,893	293,798	124	190,893	9,549,000	11,895,000	57.1	10,285,000	18,012,000	736,000
25	238,862	291,380	122	192,340	9,617,000	11,943,000	57.8	10,402,000	17,997,000	785,000
March 4	243,458	299,231	123	195,615	9,781,000	12,173,000	58.6	10,541,000	17,988,000	760,000
11	251,206	308,195	123	206,183	10,309,000	12,563,000	61.8	11,102,000	17,964,000	793,000
18	251,327	314,877	125	201,471	10,074,000	12,566,000	60.3	10,843,000	17,982,000	769,000
25	263,471	332,090	126	212,376	10,619,000	13,174,000	63.7	11,448,000	17,972,000	829,000
April 1	252,747	325,501	129	193,164	9,658,000	12,637,000	58.0	10,469,000	18,050,000	811,000
8	97,918	165,102	169	66,825	3,341,000	4,896,000	(1)	3,835,000	(1)	(1)
15	91,096	148,929	163	64,513	3,226,000	4,555,000	(1)	3,656,000	(1)	(1)
22	92,545	146,083	158	64,367	3,218,000	4,627,000	(1)	3,575,000	(1)	(1)
29	99,462	131,780	132	75,708	3,785,000	4,973,000	(1)	4,175,000	(1)	(1)
May 6	101,195	136,542	135	75,447	3,772,000	5,060,000	(1)	4,164,000	(1)	(1)
13	104,913	141,290	135	80,511	4,026,000	5,246,000	(1)	4,433,000	(1)	(1)
20	104,118	124,749	120	81,405	4,070,000	5,206,000	(1)	4,481,000	(1)	(1)
27	113,748	146,362	129	89,029	4,451,000	5,687,000	(1)	4,889,000	(1)	(1)
June 3	107,671	128,753	120	83,983	4,199,000	5,384,000	(1)	4,616,000	(1)	(1)
10	115,060	137,236	119	93,570	4,679,000	5,753,000	(1)	5,136,000	(1)	(1)
17	122,262	146,389	120	91,407	4,570,000	6,113,000	(2)	5,013,000	(2)	(2)
24	127,065	148,713	117	97,986	4,898,000	6,363,000	(3)	5,363,000	(3)	(3)

July 1	124,721	165,287	107	66,470	4,771,000	5,136,000	(1)	3,678,000	(1)	(1)
8	102,714	110,290	107	66,875	3,344,000	6,500,000	(1)	4,123,000	(1)	(1)
15	130,004	110,964	85	75,376	3,769,000	6,722,000	(1)	3,692,000	(1)	(1)
22	134,442	96,849	72	67,261	3,363,000	6,722,000	(1)	3,952,000	(1)	(1)
29	142,303	100,476	71	71,423	3,571,000	7,115,000	(1)	4,313,000	(1)	(1)
August 5	128,595	110,396	86	78,153	3,908,000	6,428,000	(1)	4,606,000	(1)	(1)
12	143,247	117,946	82	83,723	4,185,000	7,162,000	(1)	4,609,000	(1)	(1)
19	153,906	120,934	79	83,498	4,175,000	7,695,000	(1)	6,736,000	(1)	(1)
26	215,011	177,369	82	123,387	6,169,000	10,751,000	(1)	9,359,000	(2)	(2)
September 2	293,839	230,451	78	173,186	8,659,000	14,692,000	(2)	8,791,000	(2)	(2)
9	292,874	214,063	73	162,492	8,125,000	14,644,000	(2)	9,737,000	(2)	(2)
16	350,861	219,692	63	181,352	9,068,000	17,543,000	(2)	9,747,000	(2)	(2)
23	367,616	212,685	58	181,346	9,067,000	18,381,000	(2)	9,822,000	(2)	(2)
30	381,878	211,061	55	182,158	9,108,000	19,094,000	(2)	9,736,000	(2)	(2)
October 7	391,941	207,759	53	180,163	9,008,000	19,597,000	(2)	10,110,000	(2)	(2)
14	404,998	211,214	52	186,952	9,348,000	20,205,000	(2)	10,378,000	(2)	(2)
21	415,511	215,943	52	191,355	9,568,000	20,776,000	(2)	10,683,000	(2)	(2)
28	421,957	224,158	53	196,342	9,817,000	21,098,000	(2)	10,666,000	(2)	(2)
November 4	418,172	225,355	54	196,353	9,818,000	20,909,000	(2)	10,147,000	(2)	(2)
11	388,512	214,768	55	185,387	9,269,000	19,426,000	(2)	11,215,000	(2)	(2)
18	426,277	233,336	55	205,213	10,261,000	21,314,000	(2)	11,038,000	(2)	(2)
25	429,809	229,036	53	202,305	10,115,000	21,490,000	(2)	10,387,000	(2)	(2)
December 2	383,174	216,317	56	188,345	9,417,000	19,159,000	(2)	11,495,000	(2)	(2)
9	426,823	239,278	56	206,768	10,338,000	21,341,000	(2)	10,666,000	(2)	(2)
16	428,325	229,549	54	194,216	9,711,000	21,416,000	(2)	10,031,000	(2)	(2)
23	441,903	207,863	47	185,107	9,255,000	22,095,000	(2)	10,171,000	(2)	(2)
30	365,743	223,374	61	185,552	9,278,000	18,287,000	(2)			

[1] Information not available account of miners' strike.

[2] Information not published by Geological Survey.

NOTES.—Includes bituminous and lignite mines in every instance. Information shown in columns 1, 2, 3, and 4 taken from weekly coal loading reports of car service division, American Railway Association. Information shown in columns 5 and 6 deduced from columns 1 and 4. Information shown in columns 7 and 8 taken from weekly reports coal production of U. S. Geological Survey. Information shown in column 9 deduced from columns 7 and 8. Information shown in column 10 deduced from columns 5 and 8.

Statement showing, for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deducted potential capacity, by weeks, for calendar year 1922—Continued

1922, week ending—	1 Cars required	2 Cars furnished	3 % cars furn. to cars req.	4 Cars loaded	5 Approximate tonnage produced in cars loaded on 50-ton basis	6 Tonnage for which cars ordered on 50-ton basis	7 Per cent of full time worked by all mines entire United States	8 Total bituminous coal production entire United States	9 Potential production entire United States	10 Approximate tonnage produced and not shipped from mine by railroad
January 6	395,462	231,218	58	199,532	9,977,000	19,773,000	(1)	10,993,000	(1)	(1)
13	443,701	228,209	51	203,759	10,188,000	22,185,000	(1)	11,217,000	(1)	(1)
20	442,864	221,423	50	197,769	9,888,000	22,143,000	(1)	10,925,000	(1)	(1)
27	431,024	222,478	52	198,333	9,917,000	21,551,000	(1)	10,985,000	(1)	(1)
February 3	435,107	218,592	50	192,439	9,622,000	21,755,000	(1)	10,686,000	(1)	(1)
10	435,971	222,682	51	193,123	9,656,000	21,799,000	(1)	10,725,000	(1)	(1)
17	440,842	216,560	49	187,388	9,369,000	22,042,000	(1)	10,431,000	(1)	(1)
24	433,330	211,423	49	185,164	9,258,000	21,667,000	(1)	10,324,000	(1)	(1)
March 3	428,884	226,314	53	195,657	9,783,000	21,444,000	(1)	10,946,000	(1)	(1)
10	397,558	231,483	58	190,708	9,535,000	19,878,000	(1)	10,628,000	(1)	(1)
17	387,612	231,554	60	185,485	9,274,000	19,381,000	(1)	10,428,000	(1)	(1)
24	373,718	227,689	61	186,149	9,307,000	18,686,000	(1)	10,424,000	(1)	(1)
31	363,473	231,925	64	185,798	9,290,000	18,174,000	(1)	10,430,000	(1)	(1)
April 7	317,732	216,303	68	169,320	8,466,000	15,887,000	(1)	9,629,000	(1)	(1)
14	328,927	225,394	69	184,069	9,203,000	16,446,000	(1)	10,401,000	(1)	(1)
21	317,218	221,885	70	180,042	9,002,000	15,861,000	(1)	10,221,000	(1)	(1)
28	309,696	220,093	71	178,313	8,916,000	15,485,000	(1)	10,103,000	(1)	(1)
May 5	303,773	219,235	72	178,052	8,903,600	15,189,000	(1)	10,061,000	(1)	(1)
12	299,914	224,807	75	180,235	9,012,000	14,996,000	(1)	10,175,000	(1)	(1)
19	298,809	226,238	76	181,663	9,083,000	14,940,000	(1)	10,270,000	(1)	(1)
26	296,158	245,887	83	196,118	9,806,000	14,808,000	(1)	11,049,000	(1)	(1)
June 2	267,108	226,147	85	178,701	8,935,000	13,355,000	(1)	10,091,000	(1)	(1)
9	287,160	245,536	86	189,562	9,478,000	14,358,000	(1)	10,676,000	(1)	(1)
16	281,047	240,282	85	187,517	9,376,000	14,052,000	(1)	10,573,000	(1)	(1)
23	272,569	240,451	88	184,627	9,231,000	13,628,000	(1)	10,422,000	(1)	(1)
30	269,575	241,990	90	185,660	9,283,000	13,479,000	(1)	10,458,000	(1)	(1)
July 7	214,608	224,373	105	153,916	7,696,000	10,730,000	(1)	8,742,000	(1)	(1)
14	258,251	270,776	105	195,256	9,763,000	12,913,000	(1)	10,925,000	(1)	(1)
21	258,001	265,615	103	190,772	9,539,000	12,900,000	(1)	10,676,000	(1)	(1)
28	257,999	259,512	101	193,187	9,659,000	12,900,000	(1)	10,817,000	(1)	(1)
August 4	257,333	256,126	100	189,004	9,450,000	12,867,000	(1)	10,564,000	(1)	(1)
11	280,379	241,292	105	170,199	8,510,000	14,019,000	(1)	9,851,000	(1)	(1)
18	302,784	226,122	104	168,217	8,241,000	15,139,000	(1)	17,542,000	(1)	(1)

	8	249,894	238,984	93	187,983	9,309,000	12,495,000	(1)	10,485,000	(1)	(1)
	15	270,842	256,591	95	205,897	10,295,000	13,542,000	(1)	11,378,000	(1)	(1)
	22	269,946	261,768	97	206,963	10,348,000	13,497,000	(1)	11,454,000	(1)	(1)
	29	266,769	260,730	98	205,233	10,262,000	13,338,000	(1)	11,347,000	(1)	(1)
October	6	247,422	246,312	100	193,275	9,664,000	12,371,000	(1)	10,669,000	(1)	(1)
	13	251,357	251,044	100	198,799	9,940,000	12,568,000	(1)	10,953,000	(1)	(1)
	20										
	27										
November	3										
	10										
	17										
	24										
December	1										
	8										
	15										
	22										
	29										

[1] Information not published by Geological Survey.

3224 Ex. R–55 (Bronson): 3-page statement extending Exhi
13 with respect to private ownership of coal and coke cars
as to include January and October, 1923. The total number of p
vate coal and coke cars on January 1, 1923, is shown to be 27,
and on October 1, 1923, 29,296.

Ex. R–56 (Bronson): 1-page exhibit showing various classes
privately owned cars and the number in each class on August
1923. Among the classes shown are 2,015 flat-bottom gondolas, 1,
drop-bottom gondolas, 3,310 side-dump gondolas, 23,756 hopper c
623 coke cars, 65,431 refrigerator cars, and 121,358 tanks, gene
service. The total privately owned freight equipment is shown
be 230,221. A note states, "Figures taken from third quarter, Ra
way Equipment Quarterly."

Ex. R (L. & N.): 8-page statement filed by the L. & N. Ra
road Company in response to request of the commission for certa
information as to coal car supply on that railroad. The first sh
shows by months from March 1, 1920, through December, 1920, a
from January 1, 1922, through September, 1923, the coal car supp
of the Cumberland Valley division mines, including all cars, bo
assigned and unassigned, the number ordered, furnish
3225 loaded, and per cent furnished to ordered. Sheet 2 shows
assigned coal car supply of the same division of the L. & N
for the same period, by months, under the same headings. The p
cent of cars (both assigned and unassigned) furnished to cars (bo
assigned and unassigned) ordered (sheet 1) and the per cent
unassigned cars supplied to unassigned cars ordered (sheet 2) a
shown to be, respectively, as follows: March, 1920, 46.3, 41.9; Apr
40, 34.4; May, 47.5, 42.9; June, 46.2, 43.9; July, 45.5, 41.3; Augu
41.1, 38.2; September, 45.8, 41.7; October, 43.2, 38.8; Novembe
52.4, 47.4; December, 70.8, 71.4; January, February, and Marc
1922, 100, 100; April, 98.4, 98.1; May, 81.9, 79.9; June, 68.8, 6
July, 18.9, 19; August, 18, 16.9; September, 21.4, 19; Octob
26.5, 24.6; November, 27.1, 20.9; December, 33, 28.7; January, 19
30.7, 23.6; February, 26.1, 21.6; March, 38.8, 27.3; April, 45.5, 3
May, 55.1, 45.8; June, 60.3, 52.1; July, 94.8, 93.2; August, 80.3, 7
September, 73.3, 66.3. Sheets 3 and 4 show for the United Sta
Coal & Coke Company's mine, Lynch, Ky., by months for the sa
periods as sheet 2, number of cars ordered, number of cars furnish
on assigned basis (USCX cars), number of system cars furnish
per cent of total cars furnished to total cars ordered, and numb
of cars loaded, while operating on assigned private car basis. F
year 1920 the percentage shown varied from 90 to 100, except
June, when it was 69; August, when it was 76; and in Decemb
when it was 72. The per cent is shown to be 100 for the first s
months of 1922, 16 in July, 19 in August, 33 in September, 37
October, 62 in November, 48 in December, 81 in January, 1923,
in February, 84 in March, 100 in April, and from 92 to 100 the
after. Sheet 5 is a similar table showing coal car supply at Kente

and Tisdale mines of the Fordson Coal Company by monthly periods, January to September, 1923, while operating on assigned private car basis. The per cent of supply furnished each
3226 mine being in each month substantially greater than that shown in sheet 2 as the unassigned percentage supply. A note states, "The Fordson Coal Company acquired the first of its private coal cars during January, 1923." Sheet 6 is a similar statement showing car supply at Benham Mine No. 1, while operating on assigned private car basis, of the Wisconsin Steel Company, Benham, Ky., by months, from October 9, 1922, through December, 1922, and from January 1, 1923, through September, 1923, the percentage supply in each case being substantially greater than the unassigned percentage shown on sheet 2. The supply at Benham No. 2 is also shown on this sheet for November and December, 1920, and for part of April, 1922, as being on an assigned car basis. Sheets 7 and 8 are a similar statement showing the coal car supply of Coxton and Kayu mines of the Melcroft Coal Company by monthly periods, May, 1922, through September, 1923, while operating on assigned private car basis, the percentage supply for Coxton and Kayu, respectively, being as follows: May, 1922, 85, 91; June, 79, 80; July, 12, 12; August, 19, 15; September, 40, 42; October, 28, 29; November, 35, 32; December, 45, 45; January, 1923, 53, 48; February, 38, 36; March, 89, 90; April, 100, 99; May, 85, 73; June, 78, 76; July, 99, 97; August, 89, 82; September, 97, 98.

Ex. R (C. & O.): 10-page statement filed by C. & O. Ry. Co. in response to request of the commission for certain information as to coal-car supply on that railroad. Sheets 1 and 2 show cars ordered and supplied, by months, to Minden Mines Nos. 3 and 4 of New River and Pocahontas Consolidated Coal & Coke Company for period from March, 1920, through December, 1920, and from July, 1922, through September, 1923. The per cent supply is shown to be from 98.4 to 110 throughout the year 1920 and from 97.2 to 100 during period from July, 1922, through September, 1923, except that the supply of these two mines in August, 1922, is shown to be 62.7 and in September, 82.2. A note states:
3227 "July 26th to September 20th, inclusive, 1922, was the shop strike period and during this period, under service order No. 23, New River and Pocahontas Consolidated Coal Company's private cars were treated as unassigned cars except those moving under priority orders Nos. 1 and 2." Sheets 3 and 4 contain similar information with respect to cars supplied to mines of the Steel & Tube Company of America. Sheets 5, 6, 7, 8, 9, and 10 show by months cars ordered and supplied to New River and Logan districts, unassigned, assigned, and C. & O. fuel, separately, with percentages. The unassigned per cent in the New River district is shown to vary from 37.3 to 63.6 from March through December, 1920; to be 58.2 in July, 1922; and to vary from 25.9 to 39.8 from

August, 1922, through May, 1923. From June through September 1923, the per cent is shown to vary from 44.8 to 72.7. The unassigned per cent in the Logan district is shown to vary from 40 per cent to 61.8 per cent from March through December, 1920; to be 42.3 in July, 1922, and to vary from 26.5 per cent to 38.5 per cent from August, 1922, through May, 1923. From June through September, 1923, the per cent is shown to vary from 42.9 to 75.7.

Ex. R (P. R. R.): 14-page statement filed by Pennsylvania Railroad in response to request of the commission for certain information as to coal car supply on that railroad. Sheet 1 shows commercial percentage of bituminous coal car distribution on Pittsburgh division-South Fork branch to be as follows: March, 1920, 45.9; April, 33.2; May, 21.5; June, 26.8; July, 34.3; August, 40.3; September, 70; October, 51.1; November, 61; October, 1922, 45.1; November, 29.6; December, 22; January, 1923, 22.4; February, 18.5; March, 22.9; April, 47.3; and May, 60.3. Sheets 2 through 9 show total cars ordered, total cars placed (assigned private and unassigned system), and per cent of order placed at Eureka Mines Nos. 30, 31, 35, 36, 37, 39, 40, and 42, the per cent of order placed in each month being 100 or more except in March, 1920, when it was 90.5 and 93.4, respectively, at Eureka Mines Nos. 35 and 36. Practically all cars placed are shown to be assigned private cars. Sheet 10 shows for Pittsburgh division-South Fork branch and for the same periods as sheet 1, total cars ordered, total cars placed, assigned and unassigned, and per cent of order placed. The per cent of order placed is shown to vary from 57.4 to 117.7 in 1920 and from 45.4 to 95.1 in the period from October, 1922, through May, 1923. Sheet 11 shows the commercial percentage of bituminous coal car distribution on "Monon. Division-Ex. S. W. Branch" to be as follows: March, 1920, 46.7; April, 29.7; May, 27.6; June, 34.5; July, 23.7; August, 40.4; September, 37; October, 43.7; November, 43.1; October, 1922, 31.4; November, 33.6; December, 22; January, 1923, 26.7; February, 13.9; March, 15.7; April, 39.1; May, 62.1. Sheets 12 and 13 show cars ordered, cars placed (assigned and unassigned), and per cent of order placed at Mather No. 1 mine and Nemocolin mine, respectively, for the same period shown on sheet 11. Private assigned cars are first shown in November, 1920, at each of these mines and constituted practically the supply throughout the period from October, 1922, through May, 1923, the per cent of order placed being more than 100 for each month. Sheet 14 shows for the same period as sheets 12 and 13 total cars ordered, total cars placed (assigned and unassigned), and per cent of order placed on the "Monon. Division-Ex. S. W. Br." The per cent of order placed varies from 47.3 to 76.9 in the 1920 period and from 54.3 to 94.1 in the period from October, 1922, through May, 1923.

3228–3229

3230 In Supreme Court of the United States

October Term, 1926.

[Titles omitted.]

No. 709

No. 710

No. 711

No. 712

Designation by appellants of the parts of the records which shall be printed

Filed Nov. 8, 1926

The appellants and each of them in the foregoing appeals, by their respective counsel, hereby designate the entire records for printing as necessary for consideration for the determination of the points filed, except so much and such parts thereof as are designated below, which shall not be printed or otherwise reproduced by the clerk.

(a) In No. 709: Exhibits to the bill of complaint (brown cover, 466 printed pages).

3231 (b) In No. 709: Petition for leave to intervene of Pocahontas Operators' Association et al. (7 printed pages).

(c) In No. 710: Exhibit A to the petition, report and order of the commission styled "Assigned Cars for Bituminous Coal Mines, No. 12530, In re Distribution Among Coal Mines of Privately owned Cars and Cars for Railroad Fuel," decided June 13, 1923; and Exhibit B, report and order of the commission on further hearing, decided December 23, 1924 (and which embrace pages 29 to 268 of the petition).

(d) In No. 710: Petition for leave to intervene and answer of Pocahontas Operators' Association et al. (2 documents: 1, yellow cover, 7 printed pages; 1, green cover, 16 printed pages).

(e) In No. 711: Petition for leave to intervene of Central Pennsylvania Coal Producers' Association (7 printed pages).

(f) In No. 711: Petition for leave to intervene and answer of Pocahontas Operators' Association et al. (2 documents; 1, yellow cover, 7 printed pages; 1, green cover, 16 printed pages).

(g) In No. 712: Petition for leave to intervene and answer of Pocahontas Operators' Association et al. (2 documents: 1, yellow cover, 7 printed pages; 1, green cover, 16 pages printed).

(h) In all cases: Orders of the commission dated, respectively, March 22, 1921, and June 17, 1922, in case No. 13896 (two pages), and Exhibits A and B attached to the latter (6 pages).

(i) In all cases: Orders of the commission dated, respectively, July 25, 1923; September 12, 1923; October 9, 1923; November 6,

1923; December 14, 1923; December 19, 1923; March 3, 1924; May 6, 1924; June 30, 1924; October 22, 1924; and December 9, 1924, in case No. 12530.

(j) In all cases: Reports of the commission, No. 9284, Car Supply Investigation, January 18, 1917, 42 I. C. C. 657, and No. 13896, in re Rules Governing Ratings of Coal Mines, etc., December 23, 1924, 93 I. C. C. 309.

3232 (k) In all cases: Exhibit R–54 (Bronson), statement showing for bituminous and lignite mines in the entire United States (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deduced potential capacity, by weeks, for calendar years 1922 and 1923 (2 pages).

(l) In all cases: Exhibit No. 103 (Gutheim), statement showing for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deduced potential capacity, by weeks, for calendar years 1917 to 1922, inclusive (6 pages).

(m) In all cases: The following annual reports of the commission (original exhibits):

Ex. No. 16, 21st, 1907; Dec. 23, 1907.
Ex. No. 17, 34th, 1920; Dec. 1, 1920.
Ex. No. 18, 35th, 1921; Dec. 1, 1921.
Ex. No. 19, 36th, 1922; Dec. 1, 1922.
Ex. No. 20, 37th, 1923; Dec. 1, 1923.
Ex. No. 21, 38th, 1924; Dec. 1, 1924.

Then (10) printed copies each of the exhibits listed under the foregoing items (a), (c), (j), (k), and (l) will be furnished by the counsel to the clerk for the use of the court on the hearing.

November 5, 1926.

BLACKBURN ESTERLINE,
Assistant to the Solicitor General.
R. GRANVILLE CURRY,
Solicitor for Interstate Commerce Commission.

[File endorsement omitted.]

3233 In the Supreme Court of the United States

October Term, 1926. No. 709

[Title omitted.]

Designation by appellees of additional parts of the record to be printed

Filed Nov. 26, 1926

The appellees and each of them in the foregoing appeals, by their respective counsel, hereby designate the following additional parts

of the record for printing as necessary for consideration for the determination of the questions involved:

(1) Exhibit E to appellees' bill of complaint, "Assigned cars for bituminous coal mines, 80 I. C. C. 520" (brown cover), pp. 47 to 140, both inclusive, and the order of the Interstate Commerce Commission with the caption thereof on p. 141, from p. 207, beginning with the words "It appearing," to and including p. 210, omitting from such order only the names of the railroads' respondents from pp. 141 to 207, inclusive, and designating such respondents by the name of the first respondent, the "Algoma Central & Hudson Bay Railway Company et al."

3234

(2) Exhibit G to appellees' bill of complaint, Assigned cars for bituminous coal mines, 93 I. C. C. 701 (brown cover), pp. 211 to 286, both inclusive.

(3) Exhibit R–54 (Bronson), statement showing for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deduced potential capacity, by weeks, for calendar years 1922 and 1923.

(4) Exhibit No. 103 (Gutheim), statement showing for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deduced potential capacity, by weeks, for calendar years 1917 to 1922, inclusive.

(5) The following Annual Reports of the Interstate Commerce Commission (original exhibits):

Ex. No. 16, 21st, 1907; Dec. 23, 1907.
Ex. No. 17, 34th, 1920; Dec. 1, 1920.
Ex. No. 18, 35th, 1921; Dec. 1, 1921.
Ex. No. 19, 36th, 1922; Dec. 1, 1922.
Ex. No. 20, 37th, 1923; Dec. 1, 1923.
Ex. No. 21, 38th, 1924; Dec. 1, 1924.

It is understood and agreed, however, that in order to save the expense of printing these exhibits ten copies thereof may be furnished to the clerk of the Supreme Court of the United States, separately bound, for the use of the court at the hearing of the case.

JOHN HAMPTON BARNES,
Of Counsel for Appellees.

[File endorsement omitted.]

3235 In the Supreme Court of the United States

October term, 1926. No. 710

[Title omitted.]

Designation by appellees of additional parts of the record to be printed

Filed Nov. 26, 1926

Bethlehem Steel Company, Bethlehem Mines Corporation, and Bethlehem Steel Corporation, appellees in the foregoing appeal, by their counsel hereby designate the following additional parts of the record for printing as necessary for consideration for the determination of the questions involved:

(1) Exhibit R–54 (Bronson), statement showing for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deduced potential capacity, by weeks, for calendar years 1922 and 1923.

(2) Exhibit No. 103 (Gutheim), statement showing for bituminous and lignite mines in the entire United States, (a) condition of car supply, (b) percentage of full time worked, (c) actual production, and (d) deduced potential capacity, by weeks, for calendar years 1917 to 1922, inclusive.

3236 (3) The following Annual Reports of the Interstate Commerce Commission (original exhibits):

Ex. No. 16, 21st, 1907; Dec. 23, 1907.
Ex. No. 17, 34th, 1920; Dec. 1, 1920.
Ex. No. 18, 35th, 1921; Dec. 1, 1921.
Ex. No. 19, 36th, 1922; Dec. 1, 1922.
Ex. No. 20, 37th, 1923; Dec. 1, 1923.
Ex. No. 21, 38th, 1924; Dec. 1, 1924.

It is understood and agreed, however, that in order to save the expense of printing these exhibits ten copies thereof may be furnished to the clerk of the Supreme Court of the United States, separately bound, for the use of the court at the hearing of the case.

FREDERIC L. BALLARD,
Counsel for Bethlehem Steel Company, Bethlehem Mines Corporation, Bethlehem Steel Corporation, Appellees.

[File endorsement omitted.]

3237 In the Supreme Court of the United States

October term, 1926. No. 709

[Title omitted.]

Statement of points on behalf of the United States

Filed Nov. 8, 1926

United States of America will rely on the following points raised by the assignments of error in brief and in oral argument on the hearing of the appeal for the reversal of the decree of the District Court:

I. The District Court failed to give full force and effect to paragraph (12) of section 1 of the interstate commerce act, and erred in holding "We find it, however, unnecessary to base our conclusions in the case upon the construction of paragraph (12) of section 1, although its legislative history in connection with the administrative history of the assigned car rule has a bearing upon the question of the reasonableness of the order of the commission which is before us" (XXIV).

II. The District Court failed to give full force and effect to paragraphs (11), (12), (13), (14), and (15) of section 1 of the interstate commerce act and erred in holding that the commission "has misconceived the purpose of paragraph (15) of section 1" (XXII, XXIII).

III. The holding of the District Court that "the right to the use of private cars" is not subordinate to the power of Congress and of the commission to regulate interstate commerce constitutes reversible error (XV).

IV. The holding of the District Court that "the right to use of private cars is clearly recognized by the law," in the sense and
3238 manner stated in the opinion, and the commission in prescribing reasonable and nonpreferential rules of car distribution cannot treat upon the same basis as the other coal cars which the carrier owns or uses, cars owned by private shippers and used by the carrier, constitutes reversible error (XIV, XVIII).

V. The District Court ignored the primary duty of the carriers under the interstate commerce act at all times to furnish transportation including an adequate supply of cars, and erroneously sustained the claim of coal shippers to the right, in times of car shortage, to the exclusive and preferential use of coal cars owned by them in possession of, operated, and otherwise treated by the several carriers as a part of their general operation and equipment (XIX, XX).

VI. The District Court failed to discriminate between the legal title of the owners in and to the cars, and the use of the cars in interstate commerce over which the commission has full control, and erroneously held that "valuable legal right in the ownership of pri-

vate cars * * * furnishes the only means by which car owners can procure an adequate fuel supply in periods of recurrent car shortage (XVI, XI).

VII. The District Court erroneously held that the compensation to the owners for the use by railroads of private cars has been fixed by the commission at one and one-half cents per mile, and that the rentals paid by carriers to the owners of private coal cars must be considered in determining rules by which carriers are to be governed in distributing coal cars (XII, XXI).

VIII. The action of the District Court in holding that the order of the commission "undertakes by indirection to regulate the soft coal industry in matters which do not constitute transportation service relating to commerce and are not within the regulatory power of the commission," and as untenable the commission's finding that an increased pro rata allotment at unassigned-car mines will result if the assigned car rule is abolished constitutes reversible error (V, XIII).

3239 IX. The holding of the District Court "that there are no sufficient facts set out in the commission's report upon which to base findings of such discriminatory and preferential practices as to justify an order of universal application such as has been entered in this case" and "that the use of the railway fuel cars and private cars under the assigned car rule is not per se preferential" constitutes reversible error (VIII, VII).

X. The holding of the District Court that the order of the commission "is confiscatory in violation of the fifth amendment of the Constitution in depriving the railroads of the use of their mines and the private car owners of the use of their mines and cars" and "is beyond the authority of the commission, without warrant of law, and null and void" constitutes reversible error (IX, X).

XI. The holding of the District Court that the order "is unjust and unreasonable and an unlawfully arbitrary exercise of power" constitutes reversible error (IV).

XII. The District Court clearly not only substituted its judgment for the judgment of the commission but it also brushed aside and ignored the plain statute concerning a regulation pertaining to the distribution of cars for the transportation of coal in interstate commerce (III).

The District Court should have denied the injunction and dismissed the bill of complaint for want of equity.

BLACKBURN ESTERLINE,
Assistant to the Solicitor General.

NOVEMBER 5, 1926.

[File endorsement omitted.]

3240 In the Supreme Court of the United States

(October Term, 1926. No. 709)

[Title omitted.]

Designation of points relied upon by Interstate Commerce Commission

Filed Nov. 8, 1926

To the Clerk of the Supreme Court:

The appellant, Interstate Commerce Commission, hereby states the points upon which it intends to rely in the above-entitled suit as follows:

1. The court erred in substituting its judgment for the judgment of the commission as to a rule of car distribution prescribed by the commission in the exercise of its lawful discretion.

2. The court erroneously held that the commission had arbitrarily exercised its authority to require rules of car distribution, had undertaken to regulate the soft coal industry in matters which do not constitute transportation service, and exceeded its powers under the law.

3. The court erroneously held that the commission by its
3241 order assumes without authority to restrict the rights of railroads to obtain their supplies and to deprive railroads of the use of their mines and private car owners of the use of their mines and cars, in violation of the Constitution.

4. The court erred in holding that the facts set out in the commission's report are not sufficient to justify the commission's order.

5. The court erred in holding that the railroads can not reasonably secure an adequate supply of fuel under the order of the commission and that therefore the present method of obtaining railroad fuel by the use of assigned cars is justified, although the general public is thus served at the expense of other shippers and consumers of coal.

6. The court erred in holding that the "valuable legal right in the ownership of private cars * * * furnishes the only means by which the car owners can procure an adequate fuel supply in periods of recent car shortage."

7. The court erred in holding that the commission in prescribing reasonable and nonpreferential rules of car distribution can not treat upon the same basis as the other coal cars which the carrier owns or uses, cars owned by private shippers, in the possession of, operated, and otherwise treated by the several carriers as a part of their general operation and equipment.

8. The court erred in construing the provisions of section 1 of the interstate commerce act relating to car distribution as recognizing in railroads and private car owners rights which they do not have.

9. The court erred in holding to be untenable the commission's finding that an increased pro rata allotment at unassigned car mines

will result if the assigned car rule is abolished, and in holding "t
the use of the railway fuel cars and private cars under the assig
car rule is not per se preferential."

3242 10. The court erred in holding that the compensation to
owners for the use by railroads of private cars has been fix
by the commission at one and one-half cents per mile.

11. The court erred in annulling and enjoining the commissi
order of June 13, 1923, as approved by its order of December 23, 19

R. GRANVILLE CURRY,
For INTERSTATE COMMERCE COMMISSION,
Appellant

DATED NOVEMBER 6, 1926.

[File endorsement omitted.]

3243 In the Supreme Court of the United States

October Term, 1926. No. 710

[Title omitted.]

Statement of points on behalf of the United States

Filed Nov. 8, 1926

United States of America will rely on the following points raise
by the assignments of error in brief and in oral argument on th
hearing of the appeal for the reversal of the decree of the distri
court.

I. The district court failed to give full force and effect to para
graph (12) of section 1 of the interstate commerce act, and erred i
holding "We find it, however, unnecessary to base our conclusion
in the case upon the construction of paragraph (12) of section 1
although its legislative history in connection with the administra
tive history of the assigned car rule has a bearing upon the questi
of the reasonableness of the order of the commission which is befo
us" (XXIV).

II. The district court failed to give full force and effect to para
graphs (11), (12), (13), (14), and (15) of section 1 of the interstat
commerce act and erred in holding that the commission "has mi
conceived the purpose of paragraph (15) of section 1" (XXII
XXIII).

III. The holding of the district court that "the right to the u
of private cars" is not subordinate to the power of Congress and
of the commission to regulate interstate commerce constitutes revers
ible error (XV).

IV. The holding of the district court that "the right to the u
of private cars is clearly recognized by the law," in the sense and
manner stated in the opinion, and the commission in prescrib

3244 ing reasonable and non-preferential rules of car distribution
can not treat upon the same basis as the other coal cars which

he carrier owns or uses, cars owned by private shippers and used by he carriers, constitutes reversible error (XIV, XVIII).

V. The district court ignored the primary duty of the carriers nder the interstate commerce act at all times to furnish transporta- ion including an adequate supply of cars, and erroneously sustained he claim of coal shippers to the right, in times of car shortage, to he exclusive and preferential use of coal cars owned by them in ossession of, operated, and otherwise treated by the several carriers s a part of their general operation and equipment (XIX, XX).

VI. The district court failed to discriminate between the legal itle of the owners in and to the cars, and the use of the cars in nterstate commerce over which the commission has full control, and rroneously held that "valuable legal right in the ownership of pri- vate cars * * * furnishes the only means by which car owners an procure an adequate fuel supply in periods of recurrent car hortage" (XVI, XI).

VII. The district court erroneously held that the compensation to he owners for the use by railroads of private cars has been fixed y the commission at one and one-half cents per mile, and that the entals paid by carriers to the owners of private coal cars must be onsidered in determining rules by which carriers are to be governed n distributing coal cars (XII, XXI).

VIII. The action of the district court in holding that the order f the commission "undertakes by indirection to regulate the soft oal industry in matters which do not constitute transportation serv- ce relating to commerce and are not within the regulatory power f the commission," and as untenable the commission's finding that n increased pro rata allotment at unassigned-car mines will result f the assigned car rule is abolished constitutes reversible error (V, XIII).

3245 IX. The holding of the district court "that there are no sufficient facts set out in the commission's report upon which o base findings of such discriminatory and preferential practices as o justify an order of universal application such as has been entered n this case" and "that the use of the railway fuel cars and private ars under the assigned-car rule is not per se preferential" consti- utes reversible error (VIII, VII).

X. The holding of the district court that the order of the commis- ion "is confiscatory in violation of the fifth amendment of the Constitution in depriving the railroads of the use of their mines and he private car owners of the use of their mines and cars" and "is beyond the authority of the commission, without warrant of law, and null and void" constitutes reversible error (IX, X).

XI. The holding of the district court that the order "is unjust nd unreasonable and an unlawfully arbitrary exercise of power" onstitutes reversible error (IV).

XII. The district court clearly not only substituted its judgment for the judgment of the commission, but it also brushed aside and

ignored the plain statute concerning a regulation pertaining to the distribution of cars for the transportation of coal in interstate commerce (III).

The district court should have denied the injunction and dismissed the petition for want of equity.

BLACKBURN ESTERLINE,
Assistant to the Solicitor General.

NOVEMBER 5, 1926.

[File endorsement omitted.]

3246 In the Supreme Court of the United States

October Term, 1926. No. 710

[Title omitted.]

Designation of points relied upon by Interstate Commerce Commission

Filed Nov. 8, 1926

To the Clerk of the Supreme Court:

The appellant, Interstate Commerce Commission, hereby states the points upon which it intends to rely in the above-entitled suit as follows:

1. The court erred in substituting its judgment for the judgment of the commission as to a rule of car distribution prescribed by the commission in the exercise of its lawful discretion.

2. The court erroneously held that the commission had arbitrarily exercised its authority to require rules of car distribution, had undertaken to regulate the soft-coal industry in matters which do not constitute transportation service, and exceeded its powers under the law.

3. The court erroneously held that the commission by its order assumes without authority to restrict the rights of railroads to obtain their supplies and to deprive railroads of the use of their
3247 mines and private car owners of the use of their mines and cars, in violation of the Constitution.

4. The court erred in holding that the facts set out in the commission's report are not sufficient to justify the commission's order.

5. The court erred in holding that the railroads cannot reasonably secure an adequate supply of fuel under the order of the commission and that therefore the present method of obtaining railroad fuel by the use of assigned cars is justified, although the general public is thus served at the expense of other shippers and consumers of coal.

6. The court erred in holding that the "valuable legal right in the ownership of private cars * * * furnishes the only means by which the car owners can procure an adequate fuel supply in period of recent car shortage."

7. The court erred in holding that the commission in prescribing reasonable and non-preferential rules of car distribution cannot treat upon the same basis as the other coal cars which the carrier owns or uses, cars owned by private shippers, in the possession of, operated, and otherwise treated by the several carriers as a part of their general operation and equipment.

8. The court erred in construing the provisions of section 1 of the interstate commerce act relating to car distribution as recognizing in railroads and private car owners rights which they do not have.

9. The court erred in holding to be untenable the commission's finding that an increased pro rata allotment at unassigned car mines will result if the assigned car rule is abolished, and in holding "that the use of the railway fuel cars and private cars under the assigned car rule is not per se preferential."

3248 10. The court erred in holding that the compensation to the owners for the use by railroads of private cars has been fixed by the commission at one and one-half cents per mile.

11. The court erred in annulling and enjoining the commission's order of June 13, 1923, as approved by its order of December 23, 1924.

R. GRANVILLE CURRY,
For INTERSTATE COMMERCE COMMISSION,
Appellant.

DATED NOVEMBER 6, 1926.

[File endorsement omitted.]

3249 In the Supreme Court of the United States

October Term, 1926. No. 711

Statement of points on behalf of the United States

Filed Nov. 8, 1926

United States of America will rely on the following points raised by the assignments of error in brief and in oral argument on the hearing of the appeal for the reversal of the decree of the district court.

I. The district court failed to give full force and effect to paragraph (12) of section 1 of the interstate commerce act, and erred in holding "We find it, however, unnecessary to base our conclusions in the case upon the construction of paragraph (12) of section 1, although its legislative history in connection with the administrative history of the assigned car rule has a bearing upon the question of the reasonableness of the order of the commission which is before us" (XXIV).

II. The district court failed to give full force and effect to paragraphs (11), (12), (13), (14), and (15) of section 1 of the interstate commerce act and erred in holding that the commission "has misconceived the purpose of paragraph (15) of section 1" (XXII, XXIII).

III. The holding of the district court that "the right to the u of private cars" is not subordinate to the power of Congress and t the commission to regulate interstate commerce constitutes reversibl error (XV).

IV. The holding of the district court that "the right to th
3250 use of private cars is clearly recognized by the law," in th sense and manner stated in the opinion, and the commission in prescribing reasonable and non-preferential rules of car distribution cannot treat upon the same basis as the other coal cars which the carrier owns or uses, cars owned by private shippers and used by the carriers, constitutes reversible error (XIV, XVIII).

V. The district court ignored the primary duty of the carrier under the interstate commerce act at all times to furnish transportation, including an adequate supply of cars, and erroneously sustained the claim of coal shippers to the right, in times of car shortage, to the exclusive and preferential use of coal cars owned by them in possession of, operated, and otherwise treated by the several carriers as a part of their general operation and equipment (XIX, XX).

VI. The district court failed to discriminate between the legal title of the owners in and to the cars and the use of cars in interstate commerce over which the commission has full control, and erroneously held that "valuable legal right in the ownership of private cars * * * furnishes the only means by which car owners can procure an adequate fuel supply in periods of recurrent car shortage" (XVI, XI).

VII. The district court erroneously held that the compensation to the owners for the use by railroads of private cars has been fixed by the commission at one and one-half cents per mile, and that the rentals paid by carriers to the owners of private coal cars must be considered in determining rules by which carriers are to be governed in distributing coal cars (XII, XXI).

VIII. The action of the district court in holding that the order of the commission "undertakes by indirection to regulate the soft coal industry in matters which do not constitute transportation service relating to commerce and are not within the regulatory power of the commission," and as untenable the commission's finding that an increased pro rata allotment at unassigned-car mines will result if the assigned car rule is abolished constitutes reversible error (V, XIII).

3251 IX. The holding of the district court "that there are no sufficient facts set out in the commission's report upon which to base findings of such discriminatory and preferential practices as to justify an order of universal application such as has been entered in this case" and "that the use of the railway fuel cars and private cars under the assigned car rule is not per se preferential" constitutes reversible error (VIII, VII).

X. The holding of the district court that the order of the commission "is confiscatory in violation of the fifth amendment of the

Constitution in depriving the railroads of the use of their mines and the private car owners of the use of their mines and cars" and "is beyond the authority of the commission, without warrant of law, and null and void" constitutes reversible error (IX, X).

XI. The holding of the district court that the order "is unjust and unreasonable and an unlawfully arbitrary exercise of power" constitutes reversible error (IV).

XII. The district court clearly not only substituted its judgment for the judgment of the commission but it also brushed aside and ignored the plain statute concerning a regulation pertaining to the distribution of cars for the transportation of coal in interstate commerce (III).

The district court should have denied the injunction and dismissed the bill of complaint for want of equity.

BLACKBURN ESTERLINE,
Assistant to the Solicitor General.

NOVEMBER 5, 1926.

[File endorsement omitted.]

3252 In the Supreme Court of the United States

October Term, 1926. No. 711

[Title omitted.]

Designation of points relied upon by Interstate Commerce Commission

Filed Nov. 8, 1926

To the Clerk of the Supreme Court:

The appellant, Interstate Commerce Commission, hereby states the points upon which it intends to rely in the above entitled suit as follows:

1. The court erred in substituting its judgment for the judgment of the commission as to a rule of car distribution prescribed by the commission in the exercise of its lawful discretion.

2. The court erroneously held that the commission had arbitrarily exercised its authority to require rules of car distribution, had undertaken to regulate the soft coal industry in matters which do not constitute transportation service, and exceeded its powers under the law.

3. The court erroneously held that the commission by its order assumes without authority to restrict the rights of railroads to obtain their supplies and to deprive railroads of the use of their
3253 mines and private car owners of the use of their mines and cars, in violation of the constitution.

4. The court erred in holding that the facts set out in the commission's report are not sufficient to justify the commission's order.

5. The court erred in holding that the railroads can not reasonably secure an adequate supply of fuel under the order of the commission and that therefore the present method of obtaining railroad fuel by the use of assigned cars is justified, although the general public is thus served at the expense of other shippers and consumers of coal.

6. The court erred in holding that the "valuable legal right in the ownership of private cars * * * furnishes the only means by which the car owners can procure an adequate fuel supply in periods of recent car shortage."

7. The court erred in holding that the commission in prescribing reasonable and non-preferential rules of car distribution cannot treat upon the same basis as the other coal cars which the carrier owns or uses, cars owned by private shippers, in the possession of, operated, and otherwise treated by the several carriers as a part of their general operation and equipment.

8. The court erred in construing the provisions of section 1 of the interstate commerce act relating to car distribution as recognizing in railroads and private car owners rights which they do not have.

9. The court erred in holding to be untenable the commission's finding that an increased pro rata allotment at unassigned car mines will result if the assigned car rule is abolished, and in holding "that the use of the railway fuel cars and private cars under the assigned car rule is not per se preferential."

3254 10. The court erred in holding that the compensation to the owners for the use by railroads of private cars has been fixed by the commission at one and one-half cents per mile.

11. The court erred in annulling and enjoining the commission's order of June 13, 1923, as approved by its order of December 23, 1924.

R. GRANVILLE CURRY,
FOR INTERSTATE COMMERCE COMMISSION,
Appellant.

DATED NOVEMBER 6, 1926.

[File endorsement omitted.]

3255 In the Supreme Court of the United States

October Term, 1926. No. 712

[Title omitted.]

Statement of Points on Behalf of the United States

Filed Nov. 8, 1926

United States of America will rely on the following points raised by the assignments of error in brief and in oral argument on the hearing of the appeal for the reversal of the decree of the district court:

I. The district court failed to give full force and effect to paragraph (12) of section 1 of the interstate commerce act, and erred in holding "We find it, however, unnecessary to base our conclusions in the case upon the construction of paragraph (12) of section 1, although its legislative history in connection with the administrative history of the assigned car rule has a bearing upon the question of the reasonableness of the order of the commission which is before us" (XXIV).

II. The district court failed to give full force and effect to paragraphs (11), (12), (13), (14), and (15) of section 1 of the interstate commerce act and erred in holding that the commission "has misconceived the purpose of paragraph (15) of section 1" (XXII, XXIII).

III. The holding of the district court that "the right to the use of private cars" is not subordinate to the power of Congress and of the commission to regulate interstate commerce constitutes reversible error (XV).

IV. The holding of the district court that "the right to the use of private cars is clearly recognized by the law," in the sense and manner stated in the opinion, and the commission in pre-
3256 scribing reasonable and non-preferential rules of car distribution cannot treat upon the same basis as the other coal cars which the carrier owns or uses, cars owned by private shippers and used by the carriers, constitutes reversible error (XIV, XVIII).

V. The district court ignored the primary duty of the carriers under the interstate commerce act at all times to furnish transportation including an adequate supply of cars, and erroneously sustained the claim of coal shippers to the right, in times of car shortage, to the exclusive and preferential use of coal cars owned by them in possession of, operated, and otherwise treated by the several carriers as a part of their general operation and equipment (XIX, XX).

VI. The district court failed to discriminate between the legal title of the owners in and to the cars and the use of the cars in interstate commerce over which the commission has full control, and erroneously held that "valuable legal right in the ownership of private cars * * * furnishes the only means by which car owners can procure an adequate fuel supply in periods of recurrent car shortage" (XVI, XI).

VII. The district court erroneously held that the compensation to the owners for the use by railroads of private cars has been fixed by the commission at one and one-half cents per mile, and that the rentals paid by carriers to the owners of private coal cars must be considered in determining rules by which carriers are to be governed in distributing coal cars (XII, XXI).

VIII. The action of the district court in holding that the order of the commission "undertakes by indirection to regulate the soft coal industry in matters which do not constitute transportation

service relating to commerce and are not within the regulato power of the commission," and as untenable the commission's findi that an increased pro rata allotment at unassigned-car mines w result if the assigned car rule is abolished, constitutes reversi error (V, XIII).

3257 IX. The holding of the district court "that there are no su ficient facts set out in the commission's report upon which base findings of such discriminatory and preferential practices as justify an order of universal application such as has been entered this case" and "that the use of the railway fuel cars and priva cars under the assigned car rule is not per se preferential" consti tutes reversible error (VIII, VII).

X. The holding of the district court that the order of the commi sion "is confiscatory in violation of the fifth amendment of the Co stitution in depriving the railroads of the use of their mines and th private car owners of the use of their mines and cars" and "is be yond the authority of the commission, without warrant of law, an null and void" constitutes reversible error (X, XI).

XI. The holding of the district court that the order "is unjus and unreasonable and an unlawfully arbitrary exercise of power" constitutes reversible error (IV).

XII. The district court clearly not only substituted its judgmen for the judgment of the commission but it also brushed aside an ignored the plain statute concerning a regulation pertaining to th distribution of cars for the transportation of coal in interstate com merce (III).

The district court should have denied the injunction and dismisse the bill for injunction for want of equity.

BLACKBURN ESTERLINE,
Assistant to the Solicitor General.

NOVEMBER 5, 1926.

[File indorsement omitted.]

3258 In the Supreme Court of the United States

October Term, 1926. No. 712

[Title omitted.]

Designation of points relied upon by Interstate Commerce Commission

Filed Nov. 8, 1926

To the Clerk of the Supreme Court:

The appellant, Interstate Commerce Commission, hereby stat the points upon which it intends to rely in the above-entitled suit follows:

1. The court erred in substituting its judgment for the judgment of the commission as to a rule of car distribution prescribed by the commission in the exercise of its lawful discretion.

2. The court erroneously held that the commission had arbitrarily exercised its authority to require rules of car distribution, had undertaken to regulate the soft-coal industry in matters which do not constitute transportation service, and exceeded its powers under the law.

3. The court erroneously held that the commission by its order assumes without authority to restrict the rights of railroads to obtain their supplies and to deprive railroads of the use of their
3259 mines and private car owners of the use of their mines and cars, in violation of the constitution.

4. The court erred in holding that the facts set out in the commission's report are not sufficient to justify the commission's order.

5. The court erred in holding that the railroads can not reasonably secure an adequate supply of fuel under the order of the commission, and that therefore the present method of obtaining railroad fuel by the use of assigned cars is justified, although the general public is thus served at the expense of other shippers and consumers of coal.

6. The court erred in holding that the "valuable right in the ownership of private cars * * * furnishes the only means by which the car owners can procure an adequate fuel supply in periods of recent car shortage."

7. The court erred in holding that the commission in prescribing reasonable and nonpreferential rules of car distribution can not treat upon the same basis as the other coal cars which the carrier owns or uses cars owned by private shippers in the possession of, operated, and otherwise treated by the several carriers as a part of their general operation and equipment.

8. The court erred in construing the provisions of section 1 of the interstate commerce act relating to car distribution as recognizing in railroads and private-car owners rights which they do not have.

9. The court erred in holding to be untenable the commission's finding that an increased pro rata allotment at unassigned-car mines will result if the assigned-car rule is abolished and in holding "that the use of the railway fuel cars and private cars under the assigned-car rule is not per se preferential."

3260 10. The court erred in holding that the compensation to the owners for the use by railroads of private cars has been fixed by the commission at one and one-half cents per mile.

11. The court erred in annulling and enjoining the commission's order of June 13, 1923, as approved by its order of December 23, 1924.

R. GRANVILLE CURRY,
FOR INTERSTATE COMMERCE COMMISSION,
Appellant.

Dated NOVEMBER 6, 1926.

[File endorsement omitted.]

3261 In the Supreme Court of the United States

October term, 1926

[Title omitted.]

Statements of points to be relied upon and designation by appellants of parts of the record to be printed, with proof of service

Filed Nov. 13, 1926

DESIGNATION OF POINTS RELIED UPON BY THE APPELLANTS

No. 713

To the Clerk of the Supreme Court:

The appellants, Pocahontas Operators' Association and others, hereby designate their assignments of error herein as the points upon which they will rely in this appeal.

E. L. GREEVER,
Attorney for Pocahontas Operators' Association, Empire Coal and Coke Company, and Pocahontas Fuel Company, Incorporated, appellants.

NOVEMBER 9, 1926.

3262 [Title omitted.]

DESIGNATION OF POINTS RELIED UPON BY THE APPELLANTS

No. 714

To the Clerk of the Supreme Court:

The appellants, Pocahontas Operators' Association and others, hereby designate their assignments of error herein as the points upon which they will rely in this appeal.

E. L. GREEVER,
Attorney for Pocahontas Operators' Association, Empire Coal and Coke Company, and Pocahontas Fuel Company, Incorporated, appellants.

NOVEMBER 9, 1926.

3263 [Title omitted.]

DESIGNATION OF POINTS RELIED UPON BY THE APPELLANTS

No. 715

To the Clerk of the Supreme Court:

The appellants, Pocahontas Operators' Association and others, hereby designate their assignments of error herein as the points upon which they will rely in this appeal.

E. L. GREEVER,
Attorney for Pocahontas Operators' Association, Empire Coal and Coke Company, and Pocahontas Fuel Company, Incorporated, appellants.

NOVEMBER 9, 1926.

3264 [Title omitted.]

DESIGNATION OF POINTS RELIED UPON BY THE APPELLANTS

No. 716

To the Clerk of the Supreme Court:

The appellants, Pocahontas Operators' Association and others, hereby designate their assignments of error herein as the points upon which they will rely in this appeal.

E. L. GREEVER,
Attorney for Pocahontas Operators' Association, Empire Coal and Coke Company, and Pocahontas Fuel Company, Incorporated, appellants.

NOVEMBER 9, 1926.

3265 [Title omitted.]

DESIGNATION OF THE PARTS OF THE RECORD WHICH SHALL BE PRINTED BY THE CLERK

Nos. 713 to 716, inc.

To the Clerk of the Supreme Court:

The appellants and each of them in the foregoing appeals, by their counsel, hereby designate all of their appeal papers in each of said cases transmitted to the clerk of the Supreme Court of the United States by the clerk of the United States District Court for the Eastern District of Pennsylvania, and their petitions for intervention and their answers filed in said United States District Court for the Eastern District of Pennsylvania, and found in the records transmitted to the clerk of the Supreme Court of the United States by the clerk of the United States District Court for the said Eastern District of Pennsylvania, in the following cases: No. 709, United

States of America and Interstate Commerce Commission, appellants, vs. Berwind-White Coal Mining Company, et al., appellees; No. 710, United States of America and Interstate Commerce Commission, appellants, vs. Bethlehem Steel Company, et al., appellees; No. 711, United States of America and Interstate Commerce Commission, appellants, vs. Rainey Wood Coke Company, et al., appellees; and No. 712, United States of America and Interstate Commerce Commission, appellants, vs. Public Service Electric and Gas Company, appellee, for printing, as necessary for consideration for the determination of the points relied upon and designated by them.

3266–3270

E. L. GREEVER,
Attorney for Pocahontas Operators' Association, Empire Coal and Coke Company and Pocahontas Fuel Company, Incorporated, appellants.

NOVEMBER 9, 1926.

[Proofs of service of above papers omitted in printing.]
[File endorsement omitted.]

3271 In United States District Court, Eastern District of Pennsylvania

In Equity, No. 3271

[Title omitted.]

Order enlarging time within which to docket case and file the record thereof

Filed March 4, 1926

It appearing that the record is voluminous and that additional time is required to assemble, prepare and certify the transcript thereof on appeal, and for other good cause shown,

It is ordered that the time within which the United States of America and the Interstate Commerce Commission (defendants in the district court and appellants in the Supreme Court of the United States) shall docket the case and file the record thereof with the clerk of the Supreme Court be and it is hereby enlarged to and including Monday, May tenth, 1926.

VICTOR B. WOOLLEY,
Circuit Judge.
J. WHITAKER THOMPSON,
W. V. S. THOMSON,
District Judges.

[File endorsement omitted.]
[Similar orders extending time to and including November 1, 1926, cases No. 709 to 712, inclusive, omitted in printing.]

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